



**Sprint Mobile Broadband
USB Modem
by Novatel Wireless
Ovation™ U727**

www.sprint.com

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Welcome to Sprint

Sprint is committed to bringing you the best wireless technology available, and we built our network right from the start, so no matter where you are on the network, all your services will work the same.

This guide will familiarize you with our technology and with your new Sprint Mobile Broadband USB modem and Sprint Mobile Broadband software through simple, easy-to-follow instructions.

Welcome and thank you for choosing Sprint.

Introduction

This User Guide introduces you to Sprint service and all the features of your new Sprint Mobile Broadband USB modem. The guide is divided into five sections:

- ◆ **Section 1:** Sprint Mobile Broadband USB Modem Basics
- ◆ **Section 2:** Installing the Sprint Mobile Broadband USB Modem
- ◆ **Section 3:** Web Access and Location Based Services
- ◆ **Section 4:** Technical Specifications and Regulatory Information
- ◆ **Section 5:** Safety and Terms & Conditions

Throughout this guide, you'll find tips that highlight special shortcuts and timely reminders to help you make the most of your device and wireless network service. The Table of Contents and Index will also help you quickly locate specific information.

You'll get the most out of your new Sprint Mobile Broadband device if you read each section. However, if you'd like to get right to a specific feature, you can go directly to that page. Follow the instructions in that section and you'll be ready to use your USB modem in no time.

Note:	You can print out this guide to keep on hand or view it online. If you're viewing it online, simply click on a topic in the Table of Contents or on any page reference within a section to go directly to that topic.
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Section 1

Sprint Mobile Broadband USB Modem Basics



Introducing the Sprint Mobile Broadband USB Modem

In This Section

- ◆ **Package Contents**
 - ◆ **About This Guide**
 - ◆ **Your Sprint Mobile Broadband USB Modem**
-

This section lists the materials included with your device, gives you an overview of the sections of this user guide, and introduces the basic features and functions of your device.

Package Contents

Your Sprint Mobile Broadband USB modem package contains the following components:

- Sprint Mobile Broadband USB Modem by Novatel Wireless Ovation™ U727
- Notebook Monitor Clip, Lanyard and USB Cable
- Quick Start Guide
- CD-ROM including Sprint Mobile Broadband, Mac Quick Start Guide, and full User Manual

About This Guide

This user guide is designed to provide you with all the information you need to install and use your Sprint Mobile Broadband USB modem.

- **Section 1** (which you are reading) gives you an overview of the USB modem and its basic features.
- **Section 2** provides detailed, step-by-step instructions for installing and using the Sprint Mobile Broadband USB modem and Sprint Mobile Broadband software.
- **Section 3** introduces Web access and Location Services with your USB modem.
- **Section 4** provides electrical, radio frequency, and other specifications for the Sprint Mobile Broadband USB modem, as well as regulatory notices concerning your Sprint Mobile Broadband USB modem.
- **Section 5** provides important safety and liability information and includes the Terms and Conditions of use for the Sprint Mobile Broadband USB modem.

Your Sprint Mobile Broadband USB Modem

Your Sprint Mobile Broadband USB modem connects to a USB port and functions as a wireless network EVDO device. The sleek new design also contains a built-in microSD™ memory storage slot that can be used with a microSD card to download digital content directly to the device. This device allows you to:

- Access your company network.
- Send and receive email.
- Access the Internet.
- Access real-time visual maps, get driving directions, perform local business searches, and find nearby ATMs, gas stations, and restaurants even when you are uncertain of area ZIP codes.
- Save and transport important files such as documents, music, and pictures on microSD cards (sold separately) up to 4GB using your device's built-in microSD memory storage.

The Sprint Mobile Broadband USB modem operates over a type of wireless network called CDMA (Code Division Multiple Access). This network technology has many features beyond providing a wireless link, such as Web Messaging, which allows you to receive short messages using the Sprint Mobile Broadband USB modem.

To use the Sprint Mobile Broadband USB modem, you need an account that gives you access to a CDMA network.

Getting Started With Your Sprint Mobile Broadband USB Modem

In This Section

- ◆ **Getting Started**
 - ◆ **The Sprint Mobile Broadband USB Modem Software**
 - ◆ **Activating and Using Sprint Service**
 - ◆ **Care and Maintenance**
-

This section outlines the basics of getting started with your Sprint Mobile Broadband USB modem, including installing the Sprint Mobile Broadband software and activating your account.

Getting Started

Before you can begin using your Sprint Mobile Broadband USB modem, you must first:

1. Install the Sprint Mobile Broadband software, including the Sprint Mobile Broadband USB modem driver software.
2. Activate your Sprint account (unless your device has been preactivated).

The Sprint Mobile Broadband USB Modem Software

The Sprint Mobile Broadband USB modem comes with the following software:

- **Sprint Mobile Broadband software** allows you to manage the device's actions and monitor your connections.
- The **driver software** establishes the interface between the USB modem and your operating system.
- **GPS Receiver software** provides a secondary interface that gives you the ability to monitor your GPS Location Based connections and privacy settings.

The software must be installed before you insert the Sprint Mobile Broadband USB modem for the first time. Detailed instructions are provided starting on page 16.

Activating and Using Sprint Service

Before using your Sprint Mobile Broadband USB modem, you must first set up your Sprint wireless network account.

Call Sprint Customer Service

- If you will be using your Sprint Mobile Broadband USB modem primarily for business purposes, call **1-888-788-4727**.
- If your device is intended primarily for personal use, call **1-888-715-4588**.

You should have the following information available:

- Your billing address
- Your Sprint Mobile Broadband USB modem's ESN (electronic serial number) (The ESN is printed on the device's label and can also be displayed during the installation process.)
- A pen and paper to write down your account information

During this call, Sprint Customer Service will help you select your service plan. The customer service representative will also provide you with the following important account information:

- Your device's Activation Code
- Your device's phone number
- Your device's Lock Code

Tip:

You can use the Lock Code feature to prevent others from using your account should your Sprint Mobile Broadband USB modem be lost or stolen. See page 97 for instructions on using this feature.

Unless your device has been preactivated, the Sprint Mobile Broadband software application will automatically detect that no account has been configured when you run it for the first time and you will be prompted to activate your account.

Care and Maintenance

As with any electronic device, the Sprint Mobile Broadband USB modem must be handled with care to ensure reliable operation. Follow these guidelines while using and storing the USB modem:

- Do not apply adhesive labels to the device. They may cause the device to become jammed inside the USB port.
- The USB connector should fit easily into your USB port. Forcing the device into a slot may damage the connector.
- Protect your device from liquids, dust, and excessive heat.
- Store your device in a safe place, when not in use.
- Never force the USB connector in or out of your computer's USB port.
- When using a laptop computer, always remove the device from the USB port before moving your laptop to avoid any damage. (See page 24 for instructions on proper removal.)

Section 2

Installation

Installing the Sprint Mobile Broadband USB Modem

- ◆ **Getting Started**
 - ◆ **Installing the Sprint Mobile Broadband Software**
 - ◆ **Inserting and Removing the Device**
 - ◆ **Removing the Sprint Mobile Broadband USB Modem**
-

This section guides you through the steps necessary to install your Sprint Mobile Broadband USB modem and make it operational on your computer.

Getting Started

Before you can use your Sprint Mobile Broadband USB modem, you must:

1. Install the Sprint Mobile Broadband software located on the installation CD onto your computer.

Note:	Before installing your new software, delete or uninstall any previously existing modem or dialer software from your system.
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	Do not connect the device to your computer until you have installed the Sprint Mobile Broadband software onto your computer or until instructed to do so by the installation CD.
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2. Connect the USB modem to your computer's USB port. Windows will detect the device and automatically install the necessary device drivers.

Note:	A driver is software that forms the interface between a device (such as the Sprint Mobile Broadband USB modem) and the operating system on your computer.
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3. Launch the Sprint Mobile Broadband software application.
4. Activate your Sprint Mobile Broadband USB modem and Sprint account, unless the device was preactivated. If your device has not previously been activated you will be prompted to activate your device when you launch Sprint Mobile Broadband. Click 'Yes' to activate your device.

System Requirements

The Sprint Mobile Broadband USB modem is supported on the following operating systems:

- Windows®Vista, XP, and 2000
- Macintosh®OSX10.3.9 or higher
- Linux

To install and run the Sprint Mobile Broadband USB modem and accompanying software, your system requires these minimum resources:

CPU	166 MHz or faster
Interface	USB port
Communications Ports	One, Type-A USB port
Optical Drive	CD-ROM
I/O Resources	1 IRQ, 4096 bytes I/O space
Memory	64 MB
Disk Space	14 MB

Installing the Sprint Mobile Broadband Software

Follow the instructions below to install the Sprint Mobile Broadband software from the installation CD. This process requires you to restart your computer at the end of the installation; therefore, we recommend that you quit all open applications before you begin installation. The Sprint Mobile Broadband software automatically determines your computer's operating system and installs all appropriate software.

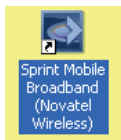
Note:	You may be required to log in with administrative privileges depending on your operating system to install the Sprint Mobile Broadband software.
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Windows® Vista, XP, and 2000

Installing the Sprint Mobile Broadband software and the Sprint Mobile Broadband USB modem driver:

1. Insert the installation CD into your CD-ROM drive. The Setup program should start automatically. If the Setup program does not launch, select **Start > Run** and enter **d:\Autorun.exe**, where **d** is your CD-ROM drive letter.
2. Select **Install Sprint Mobile Broadband (Novatel Wireless)**. (The InstallShield® Wizard will start and guide you through the installation process.)
3. Use the **Next** and **Back** buttons to navigate through the installation wizard, noting the following:
 - In order to continue with the installation, you must select **"I accept the terms of the License Agreement."**

- Select the default option, **Sprint Mobile Broadband USB Modem by Novatel Wireless, Inc.**, if prompted, and click **Next**.
 - Please wait a few minutes while the software installs.
4. Click **Restart** or **Finish** to complete installation of the Sprint Mobile Broadband software. Once the installation procedure is complete and you have rebooted your computer (either automatically or manually), launch Sprint Mobile Broadband by clicking on the Sprint Mobile Broadband (Novatel Wireless) desktop icon.



5. Sprint Mobile Broadband starts and the Insert your device... dialog appears. (Do not connect the device until instructed to do so by Sprint Mobile Broadband software.)
6. Insert the USB connector into your computer's USB port. (See page 24 for complete instructions on proper insertion and removal.)

Note:	Sprint Mobile Broadband will check to ensure you have the latest firmware installed. If there is a new firmware release for the software, the "Firmware Update" pop-up dialog will appear. See "Firmware Updates" in this section, beginning on page 19.
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7. Please wait a few moments while Windows automatically installs the necessary drivers for this device. A series of Found New Hardware messages appear and the Found New Hardware Wizard launches.
8. If your USB modem has not been activated, you will be prompted to activate your account. (For account activation

information, see Section 1B, Getting Started With Your Sprint Mobile Broadband USB Modem beginning on page 7.)

9. Windows detects the new hardware (Sprint Mobile Broadband USB modem) and installs the necessary drivers. The **Add New Hardware** Wizard or **Found New Hardware** Wizard launches, depending on your operating system. (For additional information about driver installation, See “Reinstalling the Device Driver” on page 104.)
10. Follow the prompts to allow the wizard to install the drivers.
11. Click **OK** when you are notified that the installation is complete.

On completion of this step, the Sprint Mobile Broadband software and the Sprint Mobile Broadband USB modem driver are installed and you can proceed to activate your USB modem (if it has not already been activated). See “Activating Your Sprint Mobile Broadband USB Modem” on page 35.

Note:

During this time, the Sprint Mobile Broadband message area displays “Updating Hardware” and the Go button is disabled.

Firmware Updates

The first time you attempt to connect your USB modem to your computer, Sprint Mobile Broadband will check to ensure you have the latest firmware installed. If Sprint Mobile Broadband detects that your USB modem needs to be updated a “Firmware Update” pop-up dialog appears.

To update firmware

1. If you are using a laptop, the AC power adapter must be plugged into your computer before proceeding.
2. Click **OK** to launch the firmware update utility and update the firmware in your USB modem. The software installation begins. This process takes approximately five minutes. You may stop the installation at any time by clicking **Cancel**.

Caution:	Do not disconnect the device from your computer until the installation process is complete. Failure to complete the process may result in serious errors.
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3. Once the firmware has been successfully downloaded, a confirmation screen appears. Click **Finish** to return to the Sprint Mobile Broadband main user interface.
4. When the firmware update is completed, it will reset the USB modem. Please wait a few minutes to initialize the USB modem from the Sprint network.

Note:	During this time, the Sprint Mobile Broadband message area displays “Updating Hardware” and the Go button is disabled.
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5. On completion of this process a PRL Update dialog box may be displayed. Click **OK** to update the PRL (preferred roaming list) in your device.
6. Next, Sprint Mobile Broadband will check to see if your device has been activated. If the USB modem has not been

activated, it will automatically prompt you to activate your device. Click **Yes** to activate your device. (See “Activating Your Device” on page 35.)

Caution:	Please do not remove the device during this process
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Once the USB modem is provisioned successfully, it will start OMA-DM (Open Mobile Alliance Device Management) activation to update your user profile from the OMA-DM server.

Installation on Macintosh

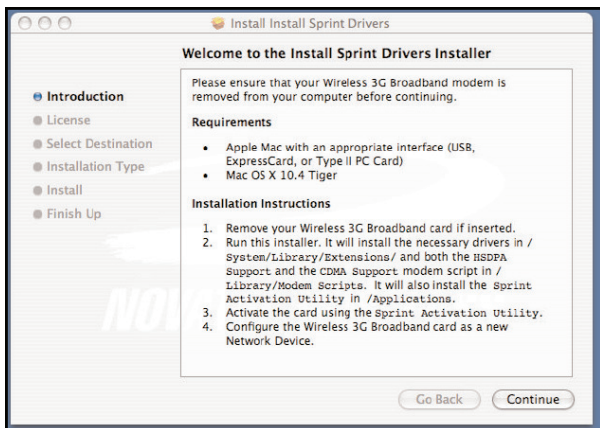
Please follow the steps below for proper configuration of the Sprint Mobile Broadband USB Modem and your Macintosh computer.

Installing the Sprint Mobile Broadband software and the Sprint Mobile Broadband USB modem driver on your Mac Computer:

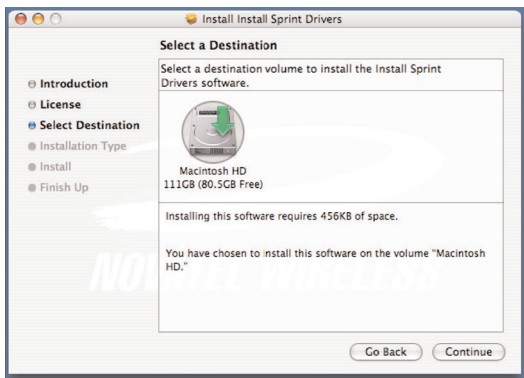
1. Insert the installation CD into your CD-ROM drive that came with your device and run the Mac package file. You will be required to sign in as administrator to install, and asked to restart your computer upon completion.

Note:	If you do not have the installation CD, visit www.sprint.com/downloads , select Mac OS as the operating system, and download and install the Novatel Rev A Device file. Follow the onscreen installation instructions.
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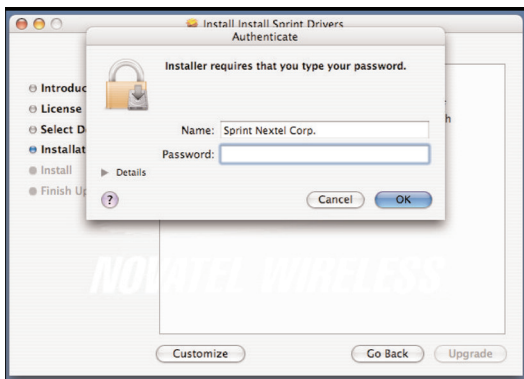
2. The Installer program should start automatically (shown below) when you insert the CD. Click **Continue** to install the software.



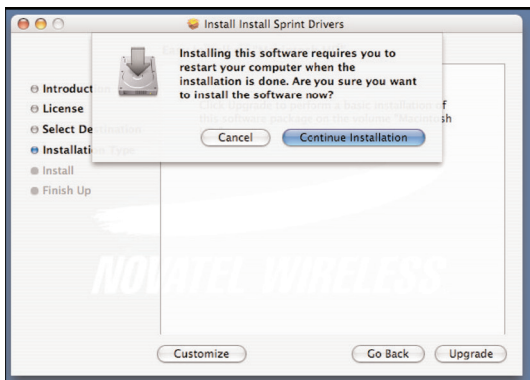
3. The location where the software will be installed is displayed. Click **Continue** to install the software.



4. You will be required to sign in as administrator to install the software. Enter an administrator user name and password. Click **OK**.



5. Click **Continue Installation** to complete the installation process. Your Macintosh computer will need to be restarted after the software is installed.



6. After the Installer completes, click **Restart** to restart your computer.

Installation on Linux

Please visit Sprint's Web site at www.sprint.com/downloads for information about installing and configuring Sprint Mobile Broadband on Linux.

- ▶ Select "Linux" from the drop-down list box to download the Sprint Mobile Broadband Guide for Linux.

Inserting and Removing the Device

Inserting the Device

Before you connect the device, you must first install the Sprint Mobile Broadband software (see page 16 in this section). After you have completed the software installation procedure, you may insert your device into your computer's USB port.

Note:

An external USB cable and clip holder accessory is included for your convenience. This accessory (not required for use with the device) is ideal for using USB devices in hard-to-reach and overcrowded spaces, a common situation with many computers, relieving strain on your ports and allowing you to use additional USB devices with convenience. The USB cable and clip holder must be used together in order to comply with FCC regulations.

The USB cable and clip holder when used with your device, frees up space around the USB port area. See "Using the External USB Cable and Clip Holder" on page 25.

When you connect the device, the following should occur:

- The USB modem is powered as soon as you connect it to the computer's USB port.
- The LED indicator on the device lights up, blinks, and turns solid green.
- Sprint Mobile Broadband starts (unless the auto-launch feature has been disabled).

Note:

Your device also contains an antenna that can be used for better coverage; this is an integral part of the device. To use this feature, flip open the device's antenna by gently gripping the top right side of the external cover with your forefinger.

Using the External USB Cable and Clip Holder

To use the accessory pair:

1. Insert the USB modem into the clip holder. (The USB Connector must be visible through the holder.)
2. Plug one end of the USB Cable into the Type A USB port on your notebook.
3. Plug the wide end of the cable into the Sprint Mobile Broadband USB modem.
4. The device is powered as soon as the USB cable is plugged properly into the appropriate Type A USB port. (The LED indicator on the device will turn green.)
5. Place the device and the clip holder on the top of the notebook.
6. Start Sprint Mobile Broadband and click **Connect**.

Using the External Antenna Connector

An external antenna and external antenna adapter cable is included for use with the USB modem. An external antenna is useful when traveling in fringe coverage areas where the network signal may be weak. To use the external antenna adapter:

1. Locate the external antenna connector on the side of the device.
2. Remove the rubber protector to expose the connector. (Keep the rubber protector in a safe place for future use in order to protect the connector from debris when not in use).
3. Connect the external antenna adapter cable to the USB modem's connector.
4. Connect the other end of the external antenna adapter cable into the external antenna.

How to Insert and Use the microSD Memory Card

It is recommended that you completely exit Sprint Mobile Broadband and remove the device from your computer before you insert the microSD Memory Card.

To Insert a microSD Card

1. Locate the microSD port on your device (shown below).
2. Line up the the microSD card with the port.



3. Gently push in the microSD card until it clicks into place.

To Eject a microSD Card

Caution:	Do not remove or attempt to remove the microSD card while the device is still in the computer, as this may damage the card and the device.
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1. Follow the instructions for proper removal of your device on page 33.
2. Gently push in the microSD card and it will pop half way out of the slot.
3. Once partially visible, you may pull the microSD card out of the slot and store in a dry, safe place.

To Save Information on the microSD Card

The process of saving files to the microSD Memory Card on your device is similar to saving files to any external flash drive on your computer.

WINDOWS

1. Insert the device into your computer's USB port. (See “Inserting and Removing the Device” on page 24.)
2. The computer detects new hardware and the Unplug/Eject icon appears in the taskbar.

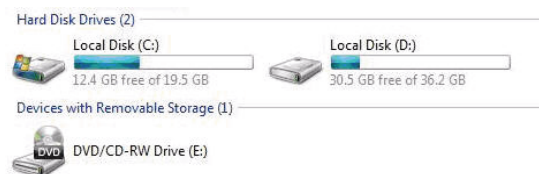
You may save files to the USB modem two ways:

Saving files from an application

1. When saving files directly from an application to the device, go to **File > Save As**.
2. In the **Save in:** box, click the down arrow to view the contents of the pull down menu.
3. Select the USB modem which appears as a drive letter (E:, F:, G:, etc.) [Mass Storage or Removable Storage].
4. Type a name for the file you are saving to the device and click **Save**.

Dragging and dropping or copying and pasting

1. Go to **My Computer** and locate the USB modem as Mass Storage or Removable Storage with a letter assigned to it (E:, F:, G:, etc.). Double-click to open the window and view the contents.



2. You may drag or copy and paste files into the Mass Storage or Removable Storage folder.

MACINTOSH

Saving files from an application

1. When saving files directly from an application to the USB modem, go to **File > Save As**.
2. In the Save in: box, click the down arrow to view the contents of the pull down menu.
3. Select the USB modem which typically appears as No Name.
4. Type a name for the file you are saving to the device in the **Save As** box and click **Save**.

Dragging and dropping or copying and pasting

1. Go to Finder and locate the USB modem as **No Name**. Double-click to open the window and view the contents.
2. You may drag or copy and paste files into the No Name folder.

How to view and transfer files from a microSD Card on your device to another computer

Note:

The steps below are only required if you choose not to install the Sprint Mobile Broadband software on another computer. If you do choose to install the software you will be able to access the storage simply by launching "My Computer" from your Windows **Start** Menu and selecting the removable storage icon.

Windows Vista

To view and transfer files from a microSD Card on your device using Vista

There are several ways to access files on the microSD card:

Method one

1. Launch **My Computer** from the Windows **Start** Menu.
2. Insert the device and wait for AutoPlay to display if UAC is enabled.
3. The AutoPlay CD window will appear. Click the Red X at the top of the window to cancel.
4. A CD Drive will now appear under "Devices with Removable Storage".
5. Right-click the CD Drive and select the **Eject** option.
6. A CD Drive will now appear under "Devices with Removable Storage".
7. Right-click the CD Drive and select the **Eject** option.
8. A message window will then appear stating that the drive is currently in use. Select **Cancel**. Note: This message will not show if the CD Drive (F:) has already been ejected).
9. A new message will appear stating that the drive is currently in use again. Select **OK**. (Note: this Microsoft

Windows message will not show if the CD Drive (F:) is already Ejected).

10. The Found New Hardware Wizard will appear four times. Click **Cancel** on each of these windows.
11. Double click the newly created removable storage drive to open up the contents of the drive and save or transfer the files.

Method two

1. Launch **My Computer** from the Windows **Start** Menu.
2. Insert the device and wait for AutoPlay to display if UAC is enabled.
3. Select **Open folder** to view files, and then right click and select **Eject** to eject CD Drive F.
4. Right-click the CD Drive and select the **Eject** option.
5. A message window will then appear stating that the drive is currently in use. Select **Cancel**. Note: This message will not show if the CD Drive (F:) has already been ejected).
6. A new message will appear stating that the drive is currently in use again. Select **OK**. (Note: this Microsoft Windows message will not show if the CD Drive (F:) is already Ejected).
7. The Found New Hardware Wizard will appear four times. Click **Cancel** on each of these windows.
8. Double click the newly created removable storage drive to open up the contents of the drive and save or transfer the files.
9. Double click STORAGE (F:) to view or transfer files on the F: Disk.

Method three

1. Select Install Sprint Mobile Broadband Lite v3.10.007, next select the **Cancel** button under the Windows Installer or Sprint Mobile Broadband Installation Wizard (this step will

auto eject the CD driver and enable the removable storage driver automatically). Please wait for the removal storage drive to appear (go step 9 and 10).

2. Double click the newly created removable storage drive to open up the contents of the drive and save or transfer the files.
3. Double click STORAGE (F:) to view or transfer files on the F: Disk.

Windows XP

1. Launch My Computer from the Windows **Start** Menu (optional).
2. Insert your device and wait for several seconds, it will automatically start Auto Installation.
3. A CD drive will appear under "Devices with Removable Storage" (Optional).
4. An installation window will appear shortly thereafter. Press **Cancel** to stop the installation.
5. Wait several seconds and the CD Drive will disappear and automatically be replaced with another removable storage drive.
6. The Found New Hardware Wizard will appear four times. Click **Cancel** on each of these windows.
7. Double click the newly created removable storage drive to open up the contents of the drive and save or transfer the files.
8. Double click on STORAGE to view and transfer files located on the E: drive.

Windows 2000

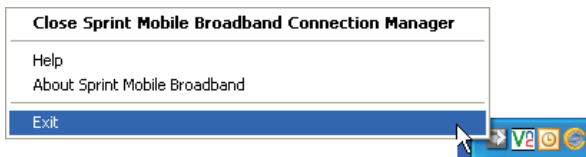
1. Launch My Computer from the Windows Start Menu (optional).
2. Insert your device.
3. A CD drive will appear under "Devices with Removable Storage."
4. An installation window will appear shortly thereafter. Press **Cancel** to stop the installation.
5. A window will appear stating "Unsafe Removal of Device". Click **OK**.
6. Wait several seconds and the CD Drive will disappear and be replaced with another removable storage drive (F:).
7. The Found New Hardware Wizard will appear four times. Click **Cancel** on each of these windows.
8. Double click the newly created removable storage drive to open up the contents of the drive and view and transfer files on the STORAGE (F:).

Turning Off the Sprint Mobile Broadband USB Modem

When your device is connected to a computer, it will be powered and attempt to communicate with the network. To turn off the device, Sprint Mobile Broadband must be closed.

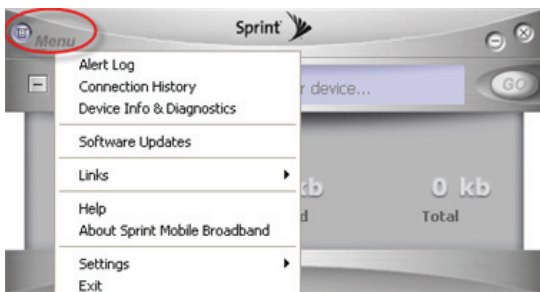
Removing the Sprint Mobile Broadband USB Modem

1. Close Sprint Mobile Broadband if it is running. There are three ways to close the program:
 - Click the close icon on the interface.
 - or —
 - Right-click the Sprint Mobile Broadband system tray icon and select **Exit** from the menu.



— or —

- Click **Menu** in the upper left-hand corner of the Sprint Mobile Broadband window and select **Exit**.



Caution: Verify that all file transfers to the microSD card are complete before removing the device; otherwise you risk losing data.

2. Remove the USB connector from your computer's USB port by gripping the device on both sides and pulling straight out to avoid damaging its antenna.

Activating Your Device

The final step to making your USB modem operational is configuring it to use your account.

Tip:

For an overview of account activation and configuration, see “Activating and Using Sprint Service” on page 9.

If you purchased a preactivated USB modem, this step is not necessary. Once the application software and driver are installed, the USB modem is ready for use.

Otherwise, you must activate and configure your account. When you purchased a Sprint Mobile Broadband USB modem and signed up for service, you were automatically assigned a user name, along with your device’s phone number (also called MDN). This information will automatically be programmed into your device along with your device’s ESN (electronic serial number), and MSID (IMSI_S) numbers.

When you start the activation process your device will connect to the Sprint network and exchange information about your device and account information. Your device’s firmware contains all the information needed to unlock your device and activate your account. Follow the steps below to activate your device.

Windows® Vista, XP, and 2000

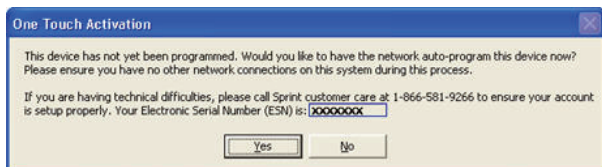
Before you can use your device on the Sprint network, you must setup your device and have an active Sprint account.

The One Touch Activation process makes setup a quick and easy task. The following steps guide you through the setup process.

To activate an account and configure your device on Windows:

Connect the device to your computer. One Touch Activation will start automatically and you will be prompted to activate your device.

The One Touch Activation dialog appears explaining that your device is not currently programmed.



Note: Please ensure you have no other network connections on this system during this process. If you are having technical difficulties, please call Sprint customer care at 1-888-211-4727 to ensure your account is setup properly. Your Electronic Serial Number (ESN) will be shown in the One Touch Activation dialog box (shown above). You may want to keep this number handy for future reference.

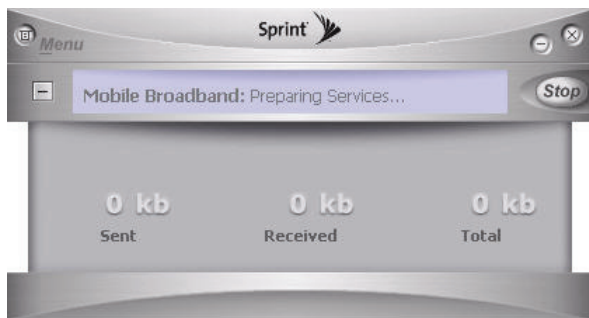
1. Click **Yes** to auto-program your device from the Sprint network or **No** to cancel activation.

Note: If you close out of Sprint Mobile Broadband, the next time you launch Sprint Mobile Broadband, it will automatically remind you to activate your device.

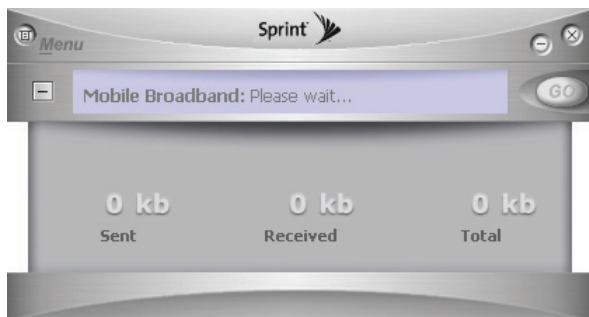
You may also manually activate your device from the Sprint Mobile Broadband submenu. See "Sprint Mobile Broadband - Novatel Wireless settings" on page 96.

2. When you start the activation process, this will begin a Client Initiated Device Configuration (CIDC) session to authenticate your user credentials on the Sprint

network. When activation is first initiated, Sprint Mobile Broadband will display “Preparing Services...”.



3. During this step Sprint Mobile Broadband will also display “Please Wait...”



4. Once the USB modem is provisioned successfully, it will start OMA-DM (Open Mobile Alliance Device Management) activation to update your user profile from the OMA-DM server. If the USB modem is not provisioned or out of the Sprint coverage area, the Sprint Mobile Broadband user

interface will display “Mobile Broadband: Searching for service...” followed by an error message. (See [Trouble Activating Your Device](#) below.)

5. Once the device successfully connects to the server, and authenticates your user credentials properly, your device is ready for use. The status of the main display will show "Disconnected" if One Touch Activation is successful.
6. You have now successfully completed the activation process.

Note:	Sprint Mobile Broadband checks to ensure you have the latest firmware installed. If there is a new firmware release for the software, the “Firmware Update” pop-up dialog appears.
--------------	--

It is recommended that you confirm a successful activation. See “Device Info & Diagnostics” on page 75 to view detailed information about your device, software, and connections. The Device Info & Diagnostics window displays your Phone number, MSID, and user name. If visible, these items confirm a successful activation.

On completion of this step, your USB modem is ready for use. Section 2B: Sprint Mobile Broadband Software, beginning on page 47, explains how to use the Sprint Mobile Broadband software to manage and monitor your connections.

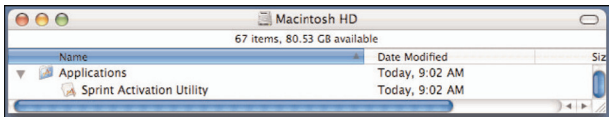
Activating Your Device: Mac OS X

Before you can use your device on the Sprint network, you must activate your device and account.

The Sprint Activation Utility makes activation a quick and easy task. The following steps guide you through the activation process.

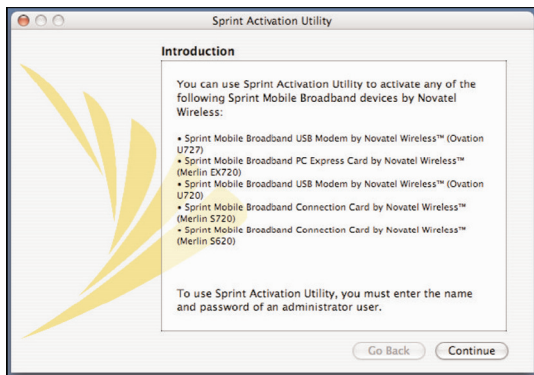
Activating your Sprint Mobile Broadband device on the Sprint Network:

1. Once your computer has restarted, open your Applications folder in the hard drive and launch the Sprint Activation Utility application.

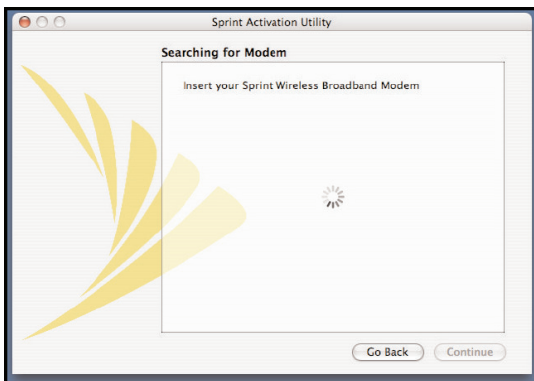


Note: Disconnect any other connections to the Internet. Turn off your AirPort connection and unplug any Ethernet connections. Follow the onscreen prompts to complete the activation process.

2. The Sprint Activation Utility screen appears (shown below). Click **Continue**.



3. The Activation Utility prompts you to insert the device. Insert your device into your computer's USB port.

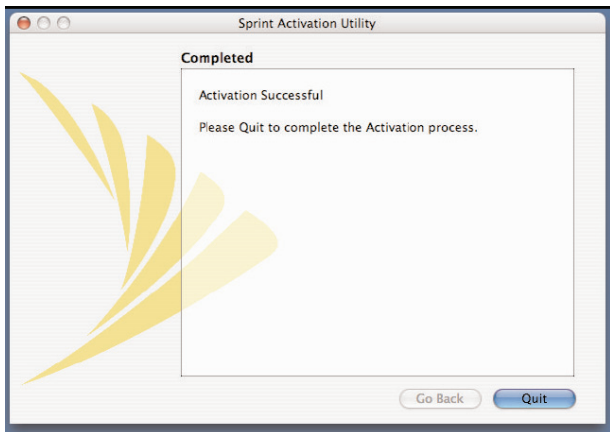


4. Click **Continue** once the Sprint Activation Utility recognizes your device.
5. The Sprint Activation Utility dialog will indicate that the device is ready to be activated. Click **Activate**.



6. The Sprint Activation Utility will display "Activation In Progress." (This may take several minutes.)

7. Once you've activated your device you can close the Sprint Activation Utility by selecting **Quit**.



8. On completion of this step, your device is ready for use. Section 2B: Sprint Mobile Broadband Software, beginning on page 47, explains how to use the Sprint Mobile Broadband software to manage and monitor your connections.

Note:

Please see Setting up your Mac Network Connections below to connect to the Sprint network with you Sprint Mobile Broadband device.

Setting up your Mac Network Connection:

1. Launch System Preferences from the Apple menu and select the Network icon.
2. When you enter Network Preferences you will see a dialog box recognizing the device. Click **OK** to close the dialog box
3. Select your device in the Show pull down menu.
4. Click the PPP tab and enter “#777” in the Telephone Number field.
5. Click the **Apply Now** button.
6. Click the Modem tab and change the Modem selection in the pull down menu to EVDO Support.
7. Uncheck the two boxes “Enable error connection....” and “Wait for dial tone....” if preselected.
8. Click the **Apply Now** button.
9. You can now connect to the Sprint Network.

To use your Mobile Broadband Device follow the instructions provided below based on your computer model:

If your computer is an Intel-based iMac or MacBook:

- From the Phone menu you can connect or disconnect to the Internet.
- While connected, you can also see the duration of your connection.

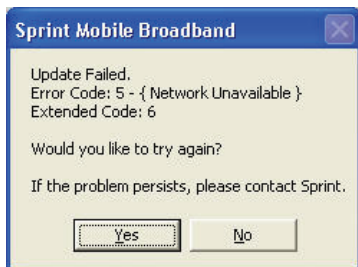
If your computer is a PowerPC-based PowerBook or iMac G-series:

1. Click **System Preferences** from the Apple menu ().
2. Select the Network icon and then select the Novatel Wireless CDMA option from the Show pull down menu.
3. In the **PPP** tab, click **Dial Now** and then **Connect** to connect your Sprint Mobile Broadband Device to the Sprint Network.

You are now connected to the Sprint Network. From this window you can connect or disconnect your Internet connection. While connected, you can also see the duration of your connection.

Trouble Activating Your Device

The following error message will appear if your data profile could not be updated to prepare your device for Sprint services.



If you are having trouble activating your device, move the device to an area with stronger reception and try again. If you are still not able to activate your device call Sprint Customer Service to set up your Sprint wireless network account.

- If you will be using your Sprint Mobile Broadband USB modem primarily for business purposes, call **1-888-788-4727**.
- If your device is intended primarily for personal use, call **1-888-715-4588**.

You should have the following information available:

- Your billing address
- Your device's ESN (electronic serial number) (The ESN is printed on the device's label and can also be displayed during the installation process.)

- A pen and paper to write down your account information

Inform your Sprint Customer Service representative that you are activating a Sprint Mobile Broadband USB modem by Novatel Wireless, Inc. (Ovation U727). During this call, Sprint Customer Service will help you choose a service plan and guide you through the activation process.

Sprint Mobile Broadband Software

In This Section

- ♦ The Sprint Mobile Broadband Software
 - ♦ The Sprint Mobile Broadband Window
 - ♦ LED Overview
 - ♦ System Tray Icons
 - ♦ Establishing and Terminating Connections
 - ♦ Sprint Mobile Broadband Software Menu Options and Settings
 - ♦ The Sprint Mobile Broadband GPS Receiver Window
-

This chapter outlines the Sprint Mobile Broadband software interface for your computer, including the components of the main window, button usage, system tray icons, and more. Once you've mastered the basics here, you'll be ready to begin using your USB modem.

The Sprint Mobile Broadband Software

The Sprint Mobile Broadband software allows you to manage and monitor the connection between your device and the network. Use the software to:

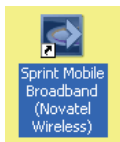
- Determine your signal strength, roaming status, Sprint connection availability, and other network parameters.
- Initiate data calls.
- View call statistics.
- Enable and disable features such as Location-Based Services and Always on Top (which allows you to set the device software to display in front of other application windows).
- Set options related to Web messages, sounds played, and the lock code security feature (which you can use to prevent others from using your USB modem).

You must run the Sprint Mobile Broadband software anytime you use your device unless you have configured the device to run in NDIS mode with Novatel Wireless, Inc. Network Adapter. (See “Novatel Wireless Network Adapter (NDIS)” on page 91.)

Starting Sprint Mobile Broadband

To launch Sprint Mobile Broadband:

- ▶ Double-click the Sprint Mobile Broadband (Novatel Wireless) desktop icon, located on your desktop.



— or —

Select **Start > Programs > Sprint > Novatel Wireless > Sprint Mobile Broadband (Novatel Wireless)**.

Depending on your settings in the Options window, the software starts automatically anytime you connect your device.

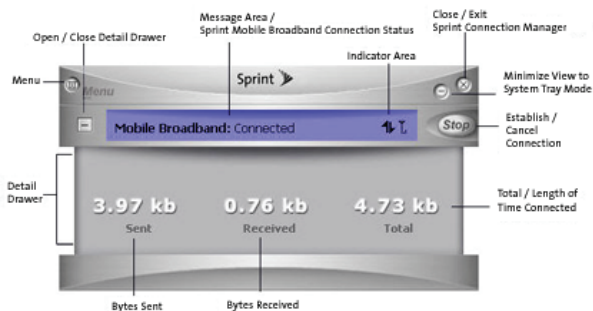
Once you make a connection in the device software, you can launch whichever application you want to use (such as your Web browser or email application).

Use the **Close** button in the upper-right corner of the interface to exit the software.

The Sprint Mobile Broadband Window

Sprint Mobile Broadband features its own Custom Main Interface (CMI) window. It includes the following components:

- A Menu button in the upper-left corner
- Minimize and Close buttons in the upper-right corner
- A message area (the left portion of the display)
- An indicator area (to the immediate right of the message area)
- A button (“GO”) used to establish or cancel a connection
- A Detail Drawer that displays the amount of data being transferred and received



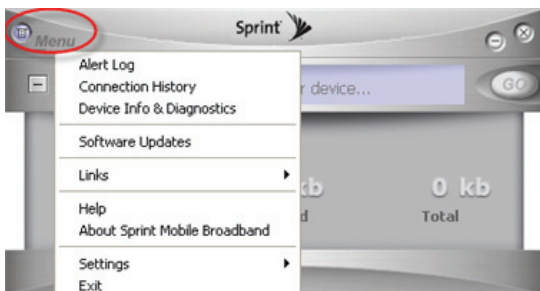
About the Interface

The following application functions are available within the main window of Sprint Mobile Broadband:

- Close: Closes the interface and exits.
- Go: Initiates a connection.
- Stop: Ends or cancels a connection.
- Minimize: Minimizes the interface to System Tray Mode.
- Menu: Provides access to tools and options settings.
- Message Area: Displays “Insert your device...,” “Ready,” “Disconnect,” “Connect,” “Authenticating,” “Connecting,” or “Connected” states. Other connection messages may apply depending on your custom options. (See page 53.)
- Transfer/Receive: Visual indicator of data activity.
- Signal Strength: Visual indicator of signal strength.
- Detail Drawer: Displays byte counter. Click “+” to expand and “-” to close.

The Menu Button

Clicking the Menu button, located in the upper-left corner of the interface, provides access to the Sprint Mobile Broadband menu.



Some menu options will remain inactive or unavailable if a connection has not been established. Once a connection is made, the options will become active. The Links menu option and the Settings menu option both contain submenus. See Section 2C, Menu Options, beginning on page 71, for details on the Sprint Mobile Broadband options and settings.

The Minimize and Close Buttons



The Minimize button closes the window but leaves the program running. When the program is minimized, its icon in the system tray can be used to determine the device status. (See “System Tray Icons” on page 59.)

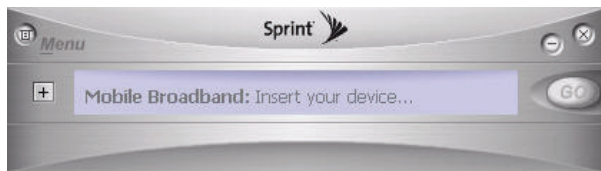
If the program is minimized, you can redisplay it by double-clicking the desktop shortcut or launching the device software from the Start menu. (See page 60 in this section.) You can also click the icon in the system tray. (The icons are defined in “System Tray Icons” on page 59.)

The Close button is used to exit the device software.

Connection Status

The Sprint Mobile Broadband interface provides information about your current connection status. Other messages may appear as a result of customized options.

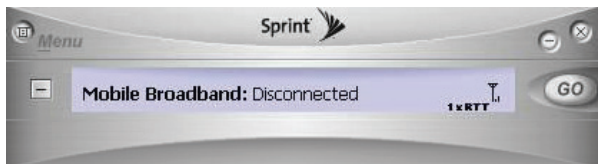
Insert your Device...



If Sprint Mobile Broadband fails to detect a device, the message “Insert your Device...” is displayed. In this state, the GO button is

unavailable to indicate it cannot be engaged. The signal strength icon is also not visible.

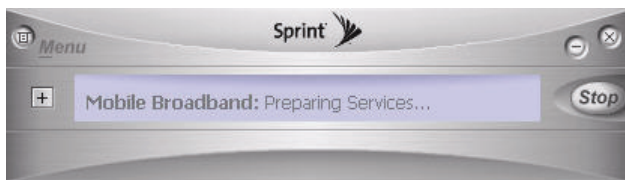
Disconnected



In this state, the **GO** button is available and the signal strength icon is visible. Click **GO** to make a connection. Sprint Mobile Broadband will connect to the Sprint provisioning server to prepare your services and you will be prompted to activate your device. Click **Yes** to activate your device.

Preparing Services

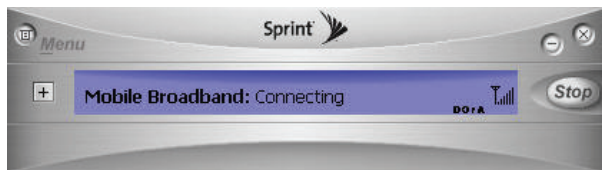
When you activate your device, the message “Preparing Services” is displayed . Please wait while your subscription services are validated. Once your services are validated you are ready to use your device.



Sprint Mobile Broadband will display “Disconnected” when ready. Click **GO** again to make a connection.

Connecting

In this state, Sprint Mobile Broadband is attempting to make a connection. During this action, the display will progress from “Connecting” to “Authenticating,” to “Authenticated.” The signal strength icon is visible and the GO button changes to Stop.

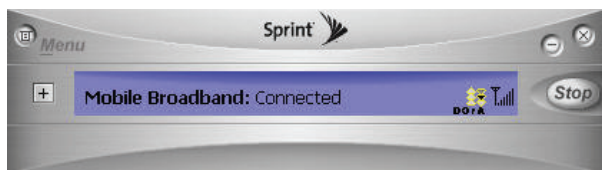


If you attempt to establish a Sprint connection that requires a password, a dialog box appears. Enter the relevant information and click **OK** to continue the connection process.

To cancel the connection, click **Stop**.

Connected

Once the connection is established, the message area displays “Connected” and the transfer/receive icon is now visible.








For other messages, see “Settings” on page 83 and “Troubleshooting Tips” on page 101.

Indicator Area

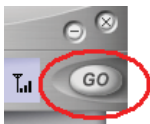
The indicator area displays icons that help you keep track of your signal strength and roaming status, notify you when you receive messages, and indicate whether certain options or features are enabled.

The table below lists the indicator area icons and explains the significance of each icon.

Indicator Area Icons

Icon	Meaning
	The Signal Strength indicator shows the strength of the radio signal. The number of bars increases (up to a maximum of six) as the signal strength increases. Note: This icon is displayed only when data services are available.
	When no bars are shown, no connection is possible for one of the following reasons: <ul style="list-style-type: none">● You are outside of the Nationwide Sprint Network service area.● The signal strength is too weak.● A network problem is preventing the device from obtaining service.
	The Transmit/Receive icon lets you know that a Sprint data connection is active.
	The CDMA 1xEVDO icon appears when CDMA 1xEVDO service is available and active.
	The Roaming indicator lets you know that you are roaming. Roaming charges may apply.

The GO Button



The GO button is used to establish and cancel a connection. The text on the button changes during different connection stages.

- **GO** – Ready to establish a connection. Click the button to start a connection.
- **Stop** – Once a connection is established, the Go button changes to read Stop. A connection is being established or is already established. Click the button to cancel or disconnect.

LED Overview






Your device, has an LED light located near the antenna of the device. The light operates as follows:

LED Status	Indicates
Off (no light)	The device has no power. The device may not be completely inserted into the computer.
Red	No Service.
Amber	Error; Reset Modem.
Green (solid)	The device is powered but is not transmitting or receiving data.
Green (blinking slowly)	The device is powered and is searching for the network.
Green (intermittent blinking)	The device is powered, connected, and is sending or receiving data.

System Tray Icons

Sprint Mobile Broadband displays an icon in the system tray (in the lower-right portion of the display screen on your computer). The system tray icon indicates your connection status.

System Tray Icons

Icon	Meaning
	Connecting - Device is ready for connection or currently making a connection.
	Connected - Connection established to the network and data transfer in process.
	Dormant - Connection established but no data transfer taking place
	Disconnected - Sprint Mobile Broadband running, but no connection in progress.
	Error - Sprint Mobile Broadband has encountered a hardware failure in your computer's device or another error while attempting to connect.

Establishing and Terminating Connections

The Sprint Mobile Broadband interface can be used to establish and terminate connections with the Sprint Mobile Broadband USB modem by simply clicking the **GO** or **Stop** buttons.

Sprint Mobile Broadband Software Menu Options and Settings

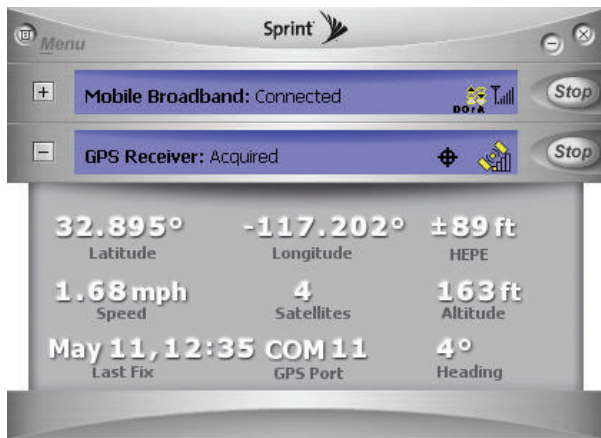
Click the **Menu** button, located at the upper left of the interface (see page 49), to open the Sprint Mobile Broadband menu.

Menu options are described in Section 2C, Menu Options beginning on page 71.

The Sprint Mobile Broadband GPS Receiver Window

Sprint Mobile Broadband features a GPS receiver interface that can be enabled from the Sprint Location Services menu. (See “Sprint Location Services Settings” on page 85 to display your GPS Receiver interface.) The GPS receiver interface includes the following components:

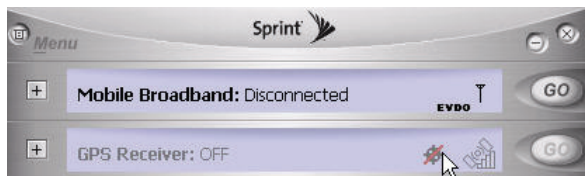
- Minimize and Close buttons in the upper-right corner.
- A message area (the left portion of the display).
- An indicator area (to the immediate right of the message area).
- A button (“GO”) used to establish/cancel a connection.
- A GPS Detail Drawer that displays your location information, such as your latitude and longitude coordinates, the GPS COM port being used, and when your last location fix was acquired.



GPS Receiver Connection States

The Sprint Mobile Broadband GPS receiver interface also provides information about your current connection status. GPS receiver connection states are as follows:

OFF (Location Disabled)



Location Disabled/Privacy On

If Sprint Mobile Broadband fails to detect a device or Location Services is disabled, the message “OFF” is displayed. In this state, the GO button is grayed-out to indicate it cannot be engaged. The Location Services privacy icon will also be crossed out, indicating that Location Services is disabled and privacy settings are on. (See “GPS Indicator Area Icons” on page 68 for more information.)

Tip:	By holding your cursor over the Location icon, Sprint Mobile Broadband will show you whether Location Services is disabled as well as your privacy state.
-------------	---

Location Enabled/Privacy Off

When Location Services is enabled, the Location Services privacy icon will not be crossed out, indicating Location Services are available and privacy settings are now 'off'. (For more information about location-sensitive services and your privacy see “**Location Based Services**” on page 165.)

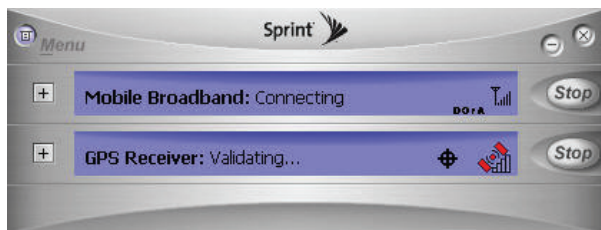
The GO button is also available when Location Services is enabled. Click **GO** to connect.



Tip: By holding your cursor over the Location icon, Sprint Mobile Broadband will display a screen tip indicating that Location Services is enabled and privacy is off.

Validating

When you start a GPS connection the validation and authorization process begins. The software will attempt to connect to the network to validate your user privileges and wireless data subscription, before location information is acquired. During this time the GO button changes to Stop.



Searching

After the network successfully validates your privileges, the device will automatically request GPS satellite almanac information from the network, so that it knows where to find the satellites. Once it retrieves the almanac information the device will then talk directly to the satellites to obtain your location coordinates. While the GPS Receiver searches for GPS satellites the message “Searching” is displayed.



If no satellites are acquired within 30 seconds, an error message is displayed: “No GPS satellites are currently available. Please move outdoors to a new location and try again.”

Note:	The Sprint Location Services Welcome screen will display each time you make a connection unless this dialog box has been disabled. Uncheck the 'Always show Welcome Screen' box if you do not want this message to appear.
--------------	--

Acquired

When the device is ready to use GPS Location-Based services or GPS (MS-Based) applications the GPS satellite icon will turn from red to yellow, then to green (if more than four satellites are found;) and the status area will display “Acquired”. The number of bars increases (up to a maximum of four) as the number of satellites found increases.



Tip: By holding your cursor over the GPS satellite icon, you can determine the number of satellites that have been found.

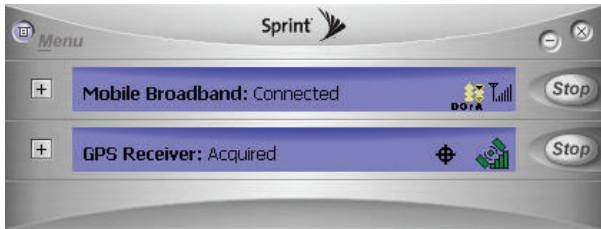
When the GPS Receiver interface is expanded, your location information will be shown in the detail drawer, including the date and time of your last location fix.

Note: For more detailed information about your GPS receiver, see “Global Positioning System Receiver” on page 116.

GPS Receiver On

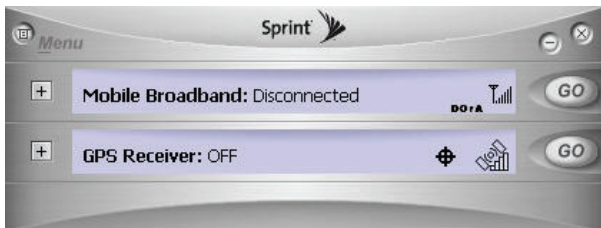
The **GO** button is unavailable and the Stop button is visible.

Press **Stop** to turn off the GPS receiver. The GPS receiver will stop transmitting immediately and close the GPS port.



GPS Off with Location Services Enabled

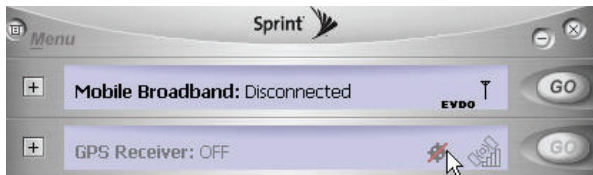
When the GPS receiver is off or disconnected from the network and Location Services is enabled, the Go button will be visible and the GPS interface will display “GPS Receiver: OFF.”



Note:	<p>For the best network performance, we recommend that you use the GPS receiver only when using Location Services.</p> <hr/> <p>To disable Location Services, hide the GPS receiver, or change these settings, refer to changing Sprint Location Services on page 85.</p>
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Location Disabled/Privacy On

When Location Services is disabled, the Location Services icon will be crossed out and the detail drawer will not display any information. The GO button is also unavailable.



Location Disabled/Privacy On







Tip:

By holding your cursor over the Location icon, Sprint Mobile Broadband will display a screen tip indicating that Location Services is disabled and privacy is now on.

GPS Indicator Area

The GPS indicator area displays icons that help you keep track of your GPS receiver and privacy status, and indicate whether certain options or features are enabled. The table below lists the indicator area icons and explains the significance of each icon.

GPS Indicator Area Icons

Icon	Meaning
	The Location Services privacy icon is enabled only when location services are available. This icon will also show you whether location-based privacy settings are on or off.
	When the Location Services privacy icon is crossed out no connection is possible for one of the following reasons: <ul style="list-style-type: none">● Sprint Mobile Broadband software fails to detect a device.● Location Services is disabled; privacy is on.● You are outside of the network service area.● A network problem is preventing the device from obtaining service.
	The GPS Satellite Transmit/Receive icon is grayed out to indicate that service is available, but not active. The GPS receiver is off.
	The GPS Satellite Transmit/Receive icon turns red to indicate that your GPS receiver is active but is waiting to validate your user privileges and is not usable.
	When the GPS Satellite icon turns yellow it indicates that GPS is ON and usable but with lower accuracy.
	The GPS Transmit/Receive icon turns green to indicate that your GPS receiver is active and location coordinates have been acquired. It also shows you the number of satellites that have been found.

Establishing and Terminating GPS Connections

The GPS receiver interface can be used to establish and terminate a GPS session with your device by simply clicking the **GO** or **Stop** buttons on the GPS Receiver.

The text on the button changes during different connection stages.

- **GO** – Ready to establish a connection. Click the button to start a connection. This directs the device to open the GPS port on your computer.
- **Stop** – Once a connection is established, the Go button changes to Stop. A connection is being established or is already established. Click the button to cancel or disconnect. The GPS receiver will stop transmitting immediately and close the GPS port.

Using your GPS Receiver with GPS Applications

The GPS receiver also allows you to use, various GPS applications, such as Microsoft Streets & Trips, using your device.

In order to use the GPS COM port on your computer to obtain location coordinates with a GPS application you must first:

- Install the GPS application, and start Sprint Mobile Broadband.
- Click **GO** on the GPS receiver interface to direct the GPS receiver to start, and then start the location-based application. (See “The Sprint Mobile Broadband GPS Receiver Window” on page 61.)
- Once you make a connection in the device software, you can launch any location-based application you have installed on your computer.

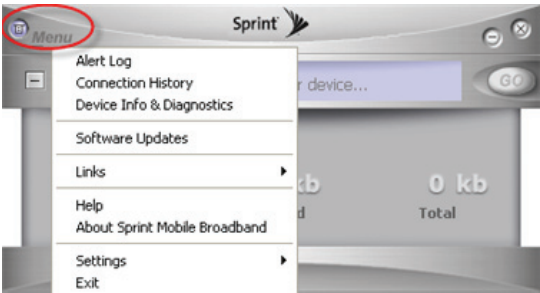
Menu Options

In This Section

- ◆ **Overview of Menu Items**
 - ◆ **Menu Item Details**
 - ◆ **Settings**
-

Sprint Mobile Broadband's primary menu options allow you to manage your device's connections and settings. This chapter provides an overview and brief description of each of the options available under the Menu drop-down list.

Overview of Menu Items



To display Sprint Mobile Broadband’s primary menu, click the **Menu** button at the top left corner of the interface.

The table on the next page lists the various menu items with brief descriptions and links to more detailed information.

Menu Items

Menu Item	Description	For more information, see:
Alert Log	View information about device errors or failures by date and time, alert, connection name, and type.	Page 74
Connection History	View information about data connections by date and time, type, and duration.	Page 74
Device Info & Diagnostics	View detailed information about your device, software, and connections.	Page 75
Software Updates	Check for posted updates to Sprint Mobile Broadband or configure to automatically check for updates.	Page 80
Location & Search Services	Access real-time 3D visual maps; get driving directions or perform local business searches directly from your GPS-enabled device.	Page 76
Links	When connected to the Sprint National Network, provides a link to the Sprint Web site.	Page 81
Help	Open the Sprint Mobile Broadband Help file.	Page 82
About Sprint Mobile Broadband	View the opening Sprint Mobile Broadband software identification screen.	Page 82
Settings	Configure Sprint Mobile Broadband to best suit your needs and preferences.	Page 84
Exit	Close the Sprint Mobile Broadband software application.	Page 33

Menu Item Details

Alert Log

The Alert Log provides a record of all alerts that have been generated while establishing and maintaining your connections and settings. You can use the Alert Log to help isolate and resolve connection issues.

To display the Alert Log:

- ▶ Select **Menu > Alert Log**.

To clear the Alert Log:

1. From the Alert Log window, click **Clear**.
2. You will see: “Clear all entries from the Alert Log?” Click **Yes** to delete all records. Click **No** to cancel.

Connection History

The Connection History dialog maintains a record of your data connections. You can choose whether to keep a record of your connection history by enabling or disabling this feature.

To enable or disable Connection History:

- ▶ Select **Menu > Settings > General > Keep Connection History**.

A check mark next to the option indicates that it is enabled.

To display the Connection History:

- ▶ Select **Menu > Connection History**.

For each message, the Connection History displays:

- The date and time the connection was initiated.
- The phone number dialed for data connections.
- The type of connection.
- The duration of the connection.

Deleting Records

To delete all records in the Connection History:

1. From the Connection History window, click **Clear**.
2. You will see a prompt: "Clear all entries from the Connection History?" Click **Yes** to delete all records. Click **No** to cancel.

Device Info & Diagnostics

The Device Info & Diagnostics window displays detailed information about your Sprint Mobile Broadband USB modem, Sprint Mobile Broadband software, signal strength, port configuration, and more.

The information displayed in this window includes:

- Manufacturer of your device
- Model of your device
- Firmware version.
- Device phone number.
- Your active user name on the Sprint network
- Hardware version.
- Sprint Mobile Broadband software version and build.
- Version of PRL (Preferred Roaming List, which specifies the radio frequency channels that the USB modem is permitted to use).
- Device's capabilities and coverage.
- Various communication and device tests and results.

To access the Device Info & Diagnostics menu:

- ▶ Select **Menu > Device Info & Diagnostics**.

To view information about your system, including installed files:

- ▶ Click the **System Information** button.

Information obtained from the System Information sections can be used to create a report that can be saved and then sent via email to a Sprint Customer Service representative to help in troubleshooting your computer.

Location & Search Services

The Location & Search Services menu provides quick access to real-time 3D visual maps; you can get driving directions or perform local business searches directly from your GPS-ready device. Your device can identify your locale instantly in order to get the directions, help, or services you need while mobile. Use Location & Search Services to find the nearest Sprint store, nearby restaurants, banks, hotels, gas stations, or coffee houses using the wireless-assisted global positioning system (GPS) built into your device.

When you use Sprint Location & Search Services and agree to the Privacy Consent Message, your Internet browser will start and connect to either Microsoft Live™, MapQuest®, Yahoo!® Maps, or Google™ Maps depending upon the service you select under Mapping and Search Service preferences. The default is Microsoft Live. To change these settings see “Mapping and Search Service” on page 88.

Accessing the Location & Search Services Menu

1. Click **Menu** on the Sprint Mobile Broadband Interface.
2. Select Location & Search Services from the submenu.

The Privacy Consent Agreement screen appears (if this option is enabled or turned on). Please read the Privacy Consent Agreement carefully and select “Accept” to agree to the Privacy Consent Agreement terms or “Do Not Accept” to cancel the service.

Note:	If you do not wish to see the Privacy Consent Agreement, select the Do not show again check box. You can change these settings at any time by selecting (checking) this option from the Settings > Sprint Location Services menu.
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Once you accept the agreement a series of messages will appear. Your device will attempt to connect and acquire the services that you selected.

Note:	There are limitations to this service that you should be aware of. Please refer to Location-Based Service Limitations below.
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After service is found, click **GO** from the Sprint Mobile Broadband main window to connect.

Location-Based Service Limitations

This section describes the limitations that apply to all Sprint's Location-Based Search Services sold under a Sprint Agreement. Please note the following:

1. You are allowed only one location fix per hour while indoors.
2. You must be in Sprint's coverage area in order to obtain a location fix indoors.
3. You must also be connected to the Sprint Mobile Broadband network in order to acquire a location fix while indoors.
4. Location mobility is not fully supported in this release.

Location-Based Services use Advanced Forward Link Trilateration (AFLT) while you are indoors or when there are no satellites in view. AFLT is a type of handset-based position location technology. Unlike A-GPS, AFLT does not use GPS satellites to determine location. To determine location, your device takes measurements of signals from nearby cellular base stations (towers) and reports the time and distance readings back to the network, which are then used to triangulate an approximate location of the device. In general, at least three surrounding base stations are required to get an optimal position fix.

Note:

AFLT is only used while indoors or when satellites are not in view. AFLT accuracy is limited by the geometry of the cell towers surrounding the device requesting location information.

If you are outside you may be able to obtain an updated GPS fix more often than once an hour depending on the level of visibility.

Weather conditions may also limit your ability to acquire a GPS fix while outside.

Location Services Menu

The Sprint Location Services menu is displayed when service has been acquired (shown below). From this menu you can locate the nearest Sprint store, restaurants, banks, hotels, gas stations, or coffee houses by clicking one of the hyperlinks.



Location-Based Service (LBS) Information

Your exact latitude and longitude coordinates are shown in the box above the Sprint Logo along with the time service was acquired.

Sprint Location & Search menu options

The Sprint Location & Search menu gives you the following options to choose from:

Find Nearest

- ▶ To search for specific information you can type directly in the **Find Nearest** search box. Enter your search term and click **Go**.

Finding a Sprint Store, Restaurant, Bank, Hotel, Gas Station, or Coffee House

- ▶ Click any of the hyperlinks to launch your Internet browser and perform a live search. For example, clicking **Find Nearest Coffee House** using Microsoft Live will launch your browser and automatically connect to the Microsoft Live Web site using your search criteria.

Note:	To change your settings refer to Settings, Sprint Location Services. You must close out of the Location & Search Services menu in order to change your settings.
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Accessing Sprint's Web site

Click the Sprint Logo to access the Sprint Web site. Through From there, you can access most of the services described in this section, including technical support, as well as product information.

Software Updates

From time to time, Sprint may release updates to your Sprint Mobile Broadband software. These updates may add new features or improve the network performance. This menu option allows you to check for any posted updates or to set up an automatic monthly check for updates.

To check for software updates:

- ▶ Select **Menu > Software Updates > Check Now.**

To enable or disable automatic monthly checks:

- ▶ Select **Menu > Software Updates > Check for updates once a month.**

A check mark next to the option indicates that it is enabled. Click **OK** to save changes and exit the Software Updates dialog box.

Links

During an active data connection, this menu option provides a hyperlink to the Sprint Web site. To access this link, select **Menu > Links > Sprint Web Site.**

- Choose **Sprint Broadband Coverage** to access Sprint Nextel's Power Network Coverage Tool. This tool provides color-coded maps of Sprint's wireless coverage areas when using your device outdoors under optimal conditions. Once you access the Web site, type a ZIP code in the Coverage area and click **Check Coverage** to access the tool.
- Choose **Digital Lounge** to access Sprint's Digital Lounge™. Download the latest applications, games, full music tracks and Web broadcasts — or search the Digital Lounge.
- Choose the **Speed Test** option to access Sprint's Speed Test application and test your current Mobile Broadband network speeds. The speed test can evaluate the upload and download speeds from your computer to the Sprint network.
- Choose **Sprint Web Site** to directly access www.sprint.com.
- Select **Sprint Easy Office** to connect directly to Sprint Easy Office

Note:

The Sprint Mobile Broadband Links menu does not allow you to add or remove links. Continue to manage direct links to your favorite Web sites through your Web browser menu.

Help

This menu item provides direct access to an online help file. You can also access the help file from any window within Sprint Mobile Broadband by pressing the 'F1' key on your keyboard. To access Help, select **Menu > Help**.

About Sprint Mobile Broadband

The About Sprint Mobile Broadband menu option allows you to display the Sprint Mobile Broadband opening splash screen, which appears when you launch Sprint Mobile Broadband.

- ▶ Select **Menu > About Sprint Mobile Broadband**.

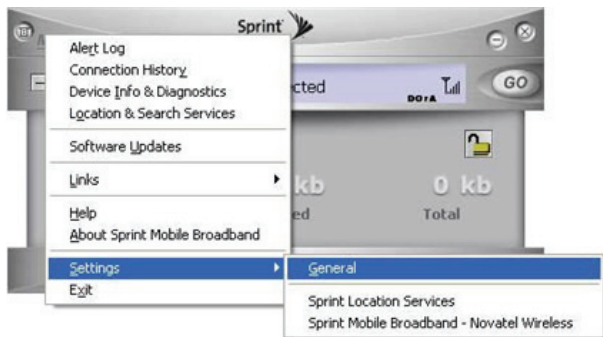
Settings

The Settings submenu allows you to configure Sprint Mobile Broadband to suit your preferences. In the Settings window you can:

- Enable and disable several features, including Window Always on Top and Connection History.
- Set program launch options.
- Customize Sprint connection settings.

To access the Settings menu:

1. Click **Menu** on the Sprint Mobile Broadband interface.
2. Select **Settings** from the submenu.



Settings Submenu

The Settings submenu contains three options:

- General
- Sprint Location Services
- Sprint Mobile Broadband - Novatel Wireless or Sprint Data Link (depending on the type of connection).

General

To display the General settings options, select **Menu > Settings > General**. Then you can customize Sprint Mobile Broadband by selecting the following options:

- **Play Sound Effects** – Select this check box to hear a clicking sound whenever an action is taken in Sprint Mobile Broadband.
- **Always on Top** – When checked, the Sprint Mobile Broadband window is displayed in front of all other open application windows, even if another window is placed over the Sprint Mobile Broadband window.
- **Start in System Tray** – Select this check box to have the Sprint Mobile Broadband interface visible on your screen regardless of which applications are open.
- **Keep Connection History** – When selected, Sprint Mobile Broadband logs all connections in the connection history. (For details on Connection History, see page 74.)
- **Launch when Windows Starts** – When selected, Sprint Mobile Broadband opens automatically upon startup of your computer.

When finished, click **Apply** and then **OK** to save changes and close the Settings dialog box.

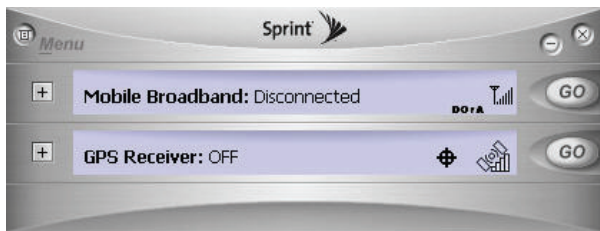
Sprint Location Services Settings

To customize your Sprint Location Services settings, select **Menu > Settings > Sprint Location Services**, and then select from the following menu options:

- **Enable Location Services** – Select this check box to have the location on your device enabled upon a successful connection to the Sprint network. You can disable this feature at any time for your privacy by deselecting (unchecking) the Enable Locations Services check box from this menu. (See “Sprint Location Services Dialog Box” on page 87.)
- **Display LBS Welcome Screen** – Select the LBS Welcome Screen check box if you would like to have a welcome screen appear when you connect to Sprint Location Services. You can disable the LBS Welcome Screen by deselecting this check box, or by deselecting the Always show Welcome Screen check box from the Welcome Screen (shown below) when it is displayed.

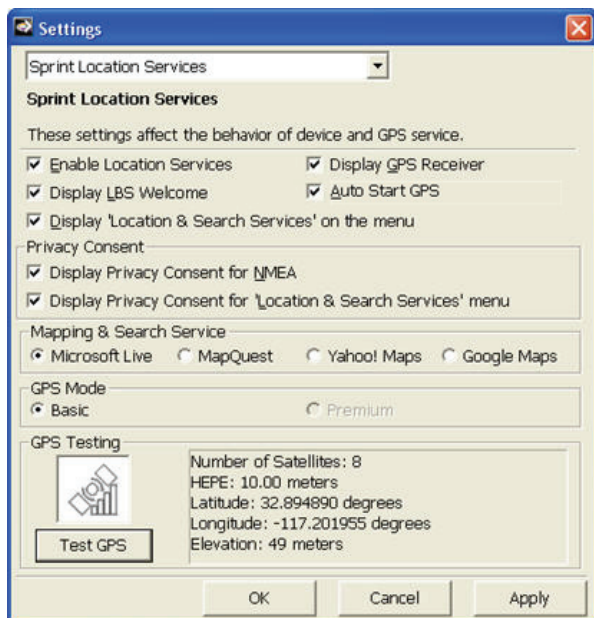


- **Display ‘Location & Search Services’ on the menu** – Select this check box to have this option available from the Sprint Mobile Broadband main menu. Unchecking this option will remove Location & Search Service from the main menu. You can display Location & Search Service on the menu at any time by selecting this option.
- **Display Privacy Consent for NMEA** – Select this check box if you wish to see the Privacy Consent Agreement for National Marine Electronics Association (NMEA) when you use Location & Search Services.
- **Display Privacy Consent for ‘Location & Search Services’ Menu** – Select this check box if you want to see the Privacy Consent Agreement for ‘Location & Search Services’ on the menu. You can change these settings at any time by selecting (checking) this option from the Settings > Sprint Location Services menu.
- **Display GPS Receiver** – Select this check box to have the GPS Receiver interface displayed when you start Sprint Mobile Broadband. The GPS Receiver will show under the main interface (shown below). When this box is unchecked the GPS Receiver interface will not be shown.



- **Auto Start GPS** – Select this check box to automatically start GPS Location Services when you connect to the network. The next time you connect to the network, Sprint Location Services will also start. The GPS Receiver will display “GPS Receiver: ON”. Refer to GPS Receiver States for more information.
- When finished, click **Apply** and then **OK** to save changes and close the Settings dialog box.

Sprint Location Services Dialog Box



- Click **OK** to close the Sprint Location Services dialog box.

Mapping and Search Service

The Mapping & Search Service section is used to set your connection preferences or service settings. You can select to connect to Microsoft Live, Map Quest, Yahoo! Maps, or Google Maps.

This section lets you choose from the following options:

- **Microsoft Live** – Select the Microsoft Live option to have Sprint Mobile Broadband connect to Microsoft Live every time you perform a location search. By selecting this option, your browser will automatically connect to the Microsoft Live Web site.
- **MapQuest** – Select the MapQuest option to have Sprint Mobile Broadband connect to only MapQuest. You can disable MapQuest at any time if you are not connected to any network by selecting another option.
- **Yahoo! Maps** – Select the Yahoo! Maps option to have Sprint Mobile Broadband connect to only Yahoo! Maps. When you apply this option, the next time you make a connection and perform a location search, Sprint Mobile Broadband will perform a location search for only Yahoo! Maps.
- **Google Maps** – Select the Google Maps option to have Sprint Mobile Broadband connect to only Google Maps.

GPS Mode

The GPS (MS-Based) Mode section is used to set your GPS connection preferences or service settings. You can select to connect only to basic services, or only premium services when they become available. There may be surcharges for premium services depending upon your service and the type of account you have.

The GPS Mode section gives you the following options to choose from:

- **Basic:** Select the Basic option for basic services.
- **Premium:** Select the Premium option to have Sprint Mobile Broadband connect to only premium services once they become available. You can disable this option at any time if you are not connected to any network by selecting another option.

Note:

There are limitations to Location-Based Services. Please review the Location-Based Service limitations below.

Location-Based Service Limitations

You are allowed only one location fix per hour while indoors. Location mobility is not fully supported in this release. Please note the following:

- You must be in Sprint coverage area in order to obtain a location fix while indoors.
- You must also be connected to the Sprint network in order to acquire a location fix while indoors.

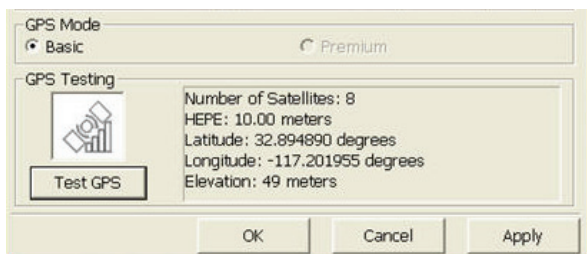
Applying your GPS Mode Preference

1. Click **OK** or **Apply** on the Settings dialog box to set your mode preference.
2. Click **OK** to close the dialog box.

GPS Testing

You can perform GPS preconnection tests before you connect to the Sprint network. Your device's GPS receiver must be locked on to at least three orbiting satellites to calculate a 2D position (latitude and longitude) and track movement. When it is locked on to four or more satellites, the GPS receiver can determine your 3D position (latitude, longitude, and elevation).

- ▶ Click the **Test GPS** button to perform the test. The number of satellites found, your HEPE (horizontal 3D estimated position error), latitude, longitude, and elevation will be shown in the box to the right of this section.



Note:	Sometimes geomagnetic disturbances in the earth's atmosphere and sunspots can affect the ability to fix on your position. If you are within Sprint's coverage area and still cannot connect, such factors may be the cause.
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Sprint Mobile Broadband Settings

To customize your Sprint Mobile Broadband - Novatel Wireless settings, select **Menu > Settings > Sprint** (connection name), and then select from the following menu options:

- **Always Show Welcome Screen** – Select this check box if you would like to have a welcome screen appear upon a successful connection to the network.
- **Go Automatically When Ready** – Select this check box to have Sprint Mobile Broadband automatically connect to the network when you insert your device.
- **Enable Network Adapter (NDIS)** – Allows you to establish a Novatel Wireless (1xEV-DO) connection to connect to the network automatically without launching Sprint Mobile Broadband. You can disable the Enable Network Adapter mode at any time by deselecting the Enable Network Adapter (NDIS) check box from this menu. (See below for more information about enabling NDIS.)
- **Enable LED on Device** – Your Sprint Mobile Broadband device, has two LED lights located near the antenna of the device. Select Enable LED on Device to turn on the LED feature.

Novatel Wireless Network Adapter (NDIS)

Enabling the Novatel Wireless Network Adapter enables always-on connectivity much like an Ethernet card and eliminates the need to use Sprint Mobile Broadband. As soon as the USB connector is inserted into your USB port, the device connects to the network automatically. The connection is also reestablished when your computer comes out of hibernate and standby modes.

To enable the Novatel Wireless Network Adapter:

1. Disconnect your device from the network. (If you are connected to the network, the Enable Network Adapter [NDIS] check box will be disabled.)
2. Access **Menu > Settings > Sprint Mobile Broadband - Novatel Wireless**.
3. Place a check mark in the check box designated Enable Network Adapter (NDIS), click **Apply**, and then click **OK**.

Note:

The first time you enable the Network Adapter (NDIS) mode, Windows will automatically install the network drivers for the Sprint Mobile Broadband USB modem - Novatel Wireless EV-DO Network Adapter. Once Windows detects the new hardware, a "Found New Hardware" pop-up message will appear in your system tray followed by the "Ready to Use" message.

Your device must be activated with Sprint and you must be within the Sprint coverage area for this feature to work.

- You may now use your device in NDIS mode and experience automatic connectivity without launching Sprint Mobile Broadband.

Service Settings (Mode)

The Mode section is used to set your connection preferences or service settings. You can choose to connect to only 1xEV-DO (high speed) or 1xRTT (lower speed) wireless networks, or you can let Sprint Mobile Broadband select your network connections.

The Mode section gives you the following options to choose from:

- **Automatic:** Select the Automatic option if you would like to have Sprint Mobile Broadband select your connections. By selecting this option, Sprint Mobile Broadband will automatically select one of the wireless networks available in your area when you launch a connection.

- **EVDO Only:** Select the EVDO Only option if you would like to have Sprint Mobile Broadband connect to only 1xEV-DO networks. You can disable EVDO Mode at any time if you are not connected to any network by selecting another option.
- **1xRTT Only:** Select the 1xRTT Only option if you would like to have Sprint Mobile Broadband connect to only 1xRTT networks. When you apply this option, the next time you make a connection Sprint Mobile Broadband will search for only 1xRTT networks.

Note:	Sprint Mobile Broadband will always try to connect to a Sprint CDMA 1xEV-DO network first before attempting to connect to a 1xRTT network. 1xEV-DO networks always have priority! If a 1xEV-DO network is unavailable then Sprint Mobile Broadband will search for an available 1xRTT network.
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Tip:	If the signal strength is too weak and you are unable to connect using 1xRTT in the 1900 MHz frequency, or if your connection fails due to this selection, disable the setting.
-------------	---

Applying your Mode Preference

1. Click **OK** or **Apply** on the Settings dialog box to reset your device. When you apply your service preference the following dialog will appear: “Service setting was changed successfully. Please wait while the modem is reset for the changes to take effect.”
2. Click **OK** to close the dialog box. When the device is reset the Go button will be visible and the Sprint Mobile Broadband user interface will display “Disconnected.” This may take a moment.

Roaming Preference

The Roaming section is used to change your roaming preference. Your coverage area and billing charges depend upon your service and the type of account you have. There may be surcharges for roaming service that vary based on whether you are in a preferred roaming area or a non-preferred roaming area. If there is no roaming agreement between Sprint and the local carrier, you may be unable to complete calls in a non-preferred zone.

The Roaming section gives you the following options to choose from:

- **Sprint:** Directs your device not to roam. If this option is selected, you will not be able to roam if Sprint coverage is unavailable. This is the default setting.
- **Automatic:** Directs your device to automatically search for any accessible network when Sprint coverage is unavailable.

Note:	When you select Automatic mode you will see a prompt: "The device is in Automatic mode and will will roam when Sprint coverage is unavailable. Roaming Rates may apply."
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- ▶ Click **OK** to change your settings and close the dialog box or click **Cancel** to return to the previous screen.

- **Roaming Only:** Directs your device to select a network that has a roaming agreement with Sprint.

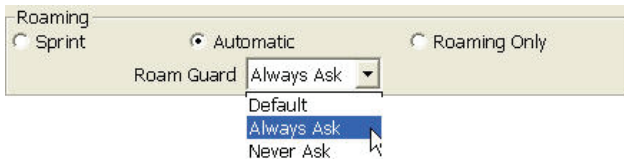
Note:

When you select Roaming Only you are roaming within a “preferred” roaming area. If there is no roaming agreement between Sprint and the local carrier, you may be unable to complete calls in a “non-preferred zone.”

Once you select this option a confirmation message will appear. Click **OK** to change your settings and close the dialog box or click **Cancel** to return to the previous screen.

Enabling and Disabling Roam Guard

- ▶ Select “**Always Ask**” from the list of **Roam Guard** options (shown below) if you want Sprint Mobile Broadband to notify you each time you make a connection and roam outside the network.



Each time you roam, the following message will appear:
“Outgoing or Incoming Roaming Data detected, roaming rates may apply.”

- ▶ Press **Roam** to continue, or **Cancel** to close the data session.

If you do not wish to see this message when you are roaming select “**Never Ask**” from the Roam Guard menu.

- ▶ Once you select “**Never Ask**”, a confirmation message will appear. Click **OK** to change your settings and close the dialog box. Data Roam Guard will not appear when you roam.

Applying your Roaming Preference

1. Click **OK** or **Apply** on the Settings dialog box to reset your device. When you apply your roaming preference the following dialog will appear: "Roaming setting was changed successfully. Please wait while modem is reset for the changes to take effect."
2. Click **OK** to close the dialog box.
3. Wait for the device to reset. This may take a moment. When the device is reset the **Go** button will be visible and the Sprint Mobile Broadband user interface will display "Disconnected."

Tip:

When you change your roaming preference an informational message will appear in your system tray.

Sprint Connection Device Settings

- **Disable Profile Updates** – Select the **Disable Profile Updates** check box (shown below) if you want to disable profile updates when you to connect to the network. The Update Profile button will be disabled (grayed out).
- **Disable PRL Updates** – Select this check box to disable the PRL download option.



- **Change User Lock** – This option enables you to change and customize your user lock code. (See below for more information on using your user lock code.)
- **Activate Device** – This option is used only when activating a new Sprint device. To manually activate your Sprint account click **Activate Device**. If your device has previously been activated, this button will be grayed out.
- **Update Profile** – Click **Update Profile** to update your user profile on the Sprint network. For example, if you changed your username or performed a password reset you may want to synchronize your device with the network.
- **Update PRL** – This option enables you to update your device's Preferred Roaming List (PRL). (See “Updating Your Device's PRL” on page 99 for more information.)

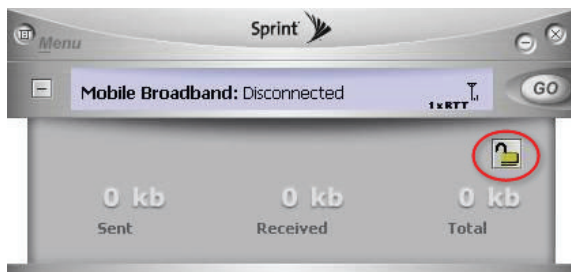
User Lock Code

The Lock Code feature can be used to prevent others from using your device and accessing your account. When the lock code is enabled, the message area will display “Device Locked” and the lock icon will appear in the indicator area.

While the device is in lock mode, you may not launch a data session without first entering your four-digit lock code. The default lock code is the last four digits of your device phone number. (See the tip box on page 99.)

To enable the lock feature:

1. Click the locked/unlocked Icon located in the Detail Drawer of the Sprint Mobile Broadband interface.



2. The “Enter User Lock Code” window appears.



3. Enter your lock code and click **OK**.

Tip:	Your default lock code is the last four digits of your device's phone number. If you can't recall your device's phone number, go to Menu > Device Info and Diagnostics or call Sprint Customer Service at 1-888-211-4727.
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To change your lock code:

1. Select **Menu > Settings > Sprint Mobile Broadband - Novatel Wireless**.
2. Click the **Change User Lock** button. The Change User Lock Code window appears.

Note:	Activating your device resets the lock code to the last four digits of the most recently activated phone number.
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3. Enter your new four-digit lock code into the dialog box.
4. Re-enter your new lock code.
5. Select a lock status: **Unlock** to leave the device unlocked; or **Lock** to enable the lock code feature immediately.

Updating Your Device's PRL

Your Sprint Mobile Broadband USB Modem contains a PRL (Preferred Roaming List) that was programmed into your device. The version of the PRL specifies the radio frequency channels that the USB modem is permitted to use, and also instructs your USB modem which cell towers to look for when establishing a connection. As new EV-DO towers become available, your PRL will become out of date. For example, you may be in an EV-DO service area, but if your device doesn't have the cell tower information in the PRL, it won't know where to find the new tower.

Keeping the PRL up-to-date provides for faster roaming signal acquisition, improved international roaming, and, on EV-DO devices, better acquisition of EV-DO data services, as Sprint is continually installing new towers that may be closer to you that offer better signal strength.

To update your PRL:

1. Select **Menu > Settings > Sprint Mobile Broadband - Novatel Wireless**.
2. Click the **Update PRL** button to check for updates. During a client initiated PRL request Sprint Mobile Broadband will display “Checking for PRL Updates,” then “Updating PRL, Please wait.”
3. After a successful session Sprint Mobile Broadband will display “Service Update Complete.”

Note:

If no PRL update is found during an update request the message “No PRL update available” is displayed.

To find detailed information about your Sprint Mobile Broadband USB modem, including the firmware version and PRL in use:

- ▶ Select **Menu > Device Info & Diagnostics** to bring up the Device Info & Diagnostics window. (See “Device Info & Diagnostics” on page 75.)

Troubleshooting Tips

In This Section

- ♦ **Problem Causes and Suggestions**
 - ♦ **Reinstalling the Device Driver**
 - ♦ **Resolving Resource Conflicts**
 - ♦ **Additional Troubleshooting Tools**
-

This section provides assistance in diagnosing and solving many common problems you may experience while using your device and Sprint Mobile Broadband with your computer.

Problem Causes and Suggestions

When properly installed, your device is a highly reliable product. Most problems are caused by one of these issues:

- The wrong driver has been installed.
- System resources required by your device are being used by other devices.
- Network coverage is not available (either because you are outside the network or because of an account or network problem).

This section describes how to diagnose and solve these and other problems. If, after reading this section, you are unable to resolve a problem, please visit www.sprint.com or contact Sprint Customer Service at 1-888-211-4727.

Error: Searching for Sprint Mobile Broadband USB Modem...

The Sprint Mobile Broadband software interface displays this message: “Searching for Sprint Mobile Broadband USB Modem...”

Possible Causes	Suggestions
<ul style="list-style-type: none">a. The USB modem is not properly connected to the computer.b. The wrong driver is installed for the USB modem.c. There is a resource conflict.	<ul style="list-style-type: none">a. Check the USB connection.b. See “Reinstalling the Sprint Mobile Broadband USB Modem Driver” on page 104.c. See “Resolving Resource Conflicts” on page 110.

Error: Splash Screen is Frozen

The Sprint Mobile Broadband splash screen is frozen..

Possible Causes	Suggestions
You may have a resource conflict.	Restart your computer. If you are unable to resolve this problem by restarting your computer, see “Resolving Resource Conflicts” on page 110.

Error: Not in Service

Sprint Mobile Broadband displays the message, “Not in Service.”

Possible Causes	Suggestions
Inadequate signal strength may occur for either of these reasons: a. You are outside the network. b. You may be inside a building or near a structure that is causing radio interference.	a. Verify that you are within the network coverage area. Coverage maps are available at www.sprint.com . b. Change your location.

Error: Connection Gets Dropped (Windows® 2000 and XP)

When attempting a data connection with Sprint Mobile Broadband, the connection gets dropped as soon as it is established. (The status goes from “Connecting” and “Connected” back to “Click ‘GO’ to Connect.”)

Possible Causes	Suggestions
The connection properties are not optimal.	<ol style="list-style-type: none">1. Click Start > Connect To > Sprint Mobile Broadband - Novatel Wireless (or Sprint Data Link) from the Windows start menu.2. Click the Properties button on the connection settings dialog.3. Click the Networking tab.4. Click the Settings button.5. Ensure that Negotiate multi-link for single-link connections is not selected in the PPP Settings dialog.6. Click OK to save your settings.

Reinstalling the Device Driver

There is a device driver for each supported operating system. Unless the appropriate driver for your version of Windows or Macintosh is installed, you will not be able to establish a network connection with your device. This section provides instructions on verifying that you have the correct device driver installed.

Note:

You must have the installation CD to complete this procedure.

Windows® 2000

To verify that the correct driver is installed:

1. Locate the existing driver.
2. Update the driver.

To locate the driver:

1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Control Panel**.
2. Double-click the **System** icon.
3. Click the **Hardware** tab.
4. Click the **Device Manager** tab.
5. Locate the device entries by using the “+” signs to expand the listings. (For example, to see all the installed modems, click the “+” sign to the left of **Modems**.) The device should have these driver entries listed in Device Manager:
 - The device driver should appear under Modems as Novatel Wireless Expedite EV-DO Modem.
 - The device should appear under Network adapters as Novatel Wireless Expedite EV-DO Network Adapter (if Network Adapter (NDIS) is enabled).
 - The device should appear under Ports (COM & LPT) as Novatel Wireless Expedite EV-DO Status Port (COM#).

If the listings above do not appear, identify the listing for your device by disconnecting the device. This causes the driver listing for the device to disappear from the list. Reconnect the device to cause the driver listing to reappear. You can identify the entries for your device by observing which entries are affected when you disconnect and reconnect the device, or by disabling Network Adapter (NDIS). (See “Novatel Wireless Network Adapter [NDIS]” on page 91.)

Updating the Driver

Close all Windows programs and open the Control Panel by selecting **Start > Settings > Control Panel**.

1. Double-click the **System** icon.
2. Click the **Hardware** tab.
3. Click the **Device Manager** tab.
4. Right-click **Novatel Wireless Expedite EV-DO Modem**.
5. Click the **Properties** button.
6. Click the **Driver** tab.
7. Click the **Update Driver...** button to launch the Update Device Driver Wizard.
8. Click **Next**.
9. Select **Display a list of known drivers for this device so that I can choose a specific driver** and click **Next**.
10. Enter **C:\Program Files\Novatel Wireless\Sprint\Sprint Mobile Broadband\Drivers**.
11. Click **OK**.
12. If the "Digital Signature Not Found" window is displayed, click **Yes**.
13. Click **Finish**. Repeat steps 6-12 as prompted.

If you are prompted to restart your computer, click **Yes**. Otherwise, restart your computer from the Start menu. (You must restart your computer to complete the driver installation.)

The correct driver should then be installed.

Windows® XP

To verify that the correct driver is installed:

1. Uninstall the existing driver.
2. Install the Windows XP driver from the Sprint Mobile Broadband USB modem installation CD.

To uninstall the existing driver:

1. Open the Control Panel by selecting **Start > Control Panel**.
2. If “Pick a Category” is displayed, select **Switch to Classic View**.
3. Double-click the **System** icon.
4. Click the **Hardware** tab.
5. Click the **Device Manager** button.
6. Locate the device entries by using the “+” signs to expand the listings. (For example, to see all the installed modems, click the “+” sign to the left of **Modems**.) The device should have these driver entries listed in Device Manager:
 - The device driver should appear under Modems as Novatel Wireless Expedite EV-DO Modem.
 - The device should appear under Network adapters as Novatel Wireless Expedite EV-DO Network Adapter (if Network Adapter (NDIS) is enabled).
 - The device should appear under Ports (COM & LPT) as Novatel Wireless Expedite EV-DO Status Port (COM#).

If the listings above do not appear, identify the listing for your device by unplugging the USB connector. This causes the driver listing for the device to disappear from the list. Reinsert the device again to cause the driver listing to reappear. You can identify the entries for your device by observing which entries are affected when you remove and replace the USB connector, or by disabling Network Adapter (NDIS). (See “Novatel Wireless Network Adapter (NDIS)” on page 91.)

7. Right-click **Novatel Wireless Expedite EV-DO Modem**.
8. Select **Uninstall** from the pop-up menu.
9. Click **OK** to confirm the uninstall.

The device listings should be removed.

Installing the Windows XP Sprint Mobile Broadband USB Modem Driver

1. Insert the installation CD into your CD-ROM drive if necessary. If the CD start-up menu appears, use the exit option in the lower-left corner of the screen to exit the menu.
2. Remove and replace your device to launch the Found New Hardware Wizard.
3. Select **Install** from a list or specific location (Advanced) on the first window of the Found New Hardware Wizard and click **Next** to proceed.
4. Select the **Search for the best driver in these locations** radio button and the **Include this location in the search** check box, and then enter **C:\Program Files\Novatel Wireless\Sprint\Sprint Mobile Broadband\Drivers..** Click **Next** to proceed to the next window.
5. If a warning appears stating that the Sprint Mobile Broadband USB modem has not passed Windows Logo testing, click **Continue Anyway**.
6. Click **Finish** and repeat steps 1 to 5 as prompted.

The correct driver is then installed.

Macintosh

To verify that the correct driver is installed:

1. Uninstall the existing driver.
2. Install the driver from the Sprint Mobile Broadband USB modem installation CD.

To uninstall the existing driver:

If you would like to remove the driver and its associated files from your machine, delete the following files (requires Administrator permissions):

- /System/Library/Extensions/NovatelWireless3G.kext
- /Library/Receipts/.pkg file related to Sprint or Novatel
- /Library/Modem Scripts/EVDO Support

The device listings should be removed.

Resolving Resource Conflicts

Note:	You must have your installation CD to complete this procedure.
--------------	--

Your device requires these system resources:

- 1 IRQ.
- 4096 bytes of I/O space.
- 2 available communications ports (one modem, one serial).

If these resources are not available to your device, you have a resource conflict. If another PC card device is installed, you may be able to free the necessary resources simply by ejecting the other device. Otherwise, you may need to disable another device (such as an internal modem, infrared device, or network device) to resolve the resource conflict. This section explains how to disable other devices.

Windows® 2000

To resolve a resource conflict in Windows 2000:

- ▶ Disable a device (internal modem, infrared device, or network card).

Disabling an Internal Modem, Infrared Device, or Network Card

1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Control Panel**.
2. Double-click the **System** icon.
3. Click the **Hardware** tab.
4. Click the **Device Manager** button.

5. Locate the device that you want to disable:
 - If you want to disable an internal modem, expand the Modem tree by clicking the “+” sign to its left.
 - If you want to disable an infrared device, expand the Infrared Devices tree by clicking the “+” sign to its left.
 - If you want to disable a network card, expand the Network Adapters tree by clicking the “+” sign to its left.
6. Right-click the device you want to disable, choose **Disable** from the pop-up menu that appears, and click **OK**.

Windows® XP

To resolve a resource conflict in Windows XP:

- ▶ Disable a device (internal modem, infrared device, or network card)

Disabling an Internal Modem, Infrared Device, or Network Card

1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Control Panel**.
2. Double-click the **System** icon.
3. Click the **Hardware** tab.
4. Click the **Device Manager** button.
5. Locate the device that you want to disable:
 - If you want to disable an internal modem, expand the Modem tree by clicking the “+” sign to its left.
 - If you want to disable an infrared device, expand the Infrared Devices tree by clicking the “+” sign to its left.
 - If you want to disable a network card, expand the Network Adapters tree by clicking the “+” sign to its left.
6. Right click the device you want to disable, choose **Disable** from the pop-up menu that appears and click **OK**.

Additional Troubleshooting Tools

Connection History

Connection History provides you with a detailed record of the connections established using your device. Since Connection History allows you to sort records by connection name, you can easily distinguish between personal and business usage. You can also save any of the messages on the Connection History screen to a log file that you can print out for your record.

Accessing Connection History

- ▶ Select **Menu > Connection History** in the Sprint Mobile Broadband interface window.

About Connection History

The Connection History window displays a table with three columns: Date/Time, Type, and Duration.

You can select entries by using the arrow keys or your mouse. Selected entries are highlighted. By default, no entry is selected.

Click the **Clear** button to access the Clear Connection History dialog box. Click **Yes** to confirm the delete or **No** to cancel.

To generate a text file containing your Connection History:

1. Select **File > Export** from the Sprint Mobile Broadband Connection history window. A **Save As** dialog box appears.
2. In the file name box type a name for the CSV log file and click **Save**. The file name is called "Connection Log.txt" by default. However, you can give the file any descriptive name you like.

Alert Log

The Alert Log provides a record of all alerts that have been received while establishing and maintaining your connections. You can use the Alert Log to help isolate and resolve connection issues.

Accessing the Alert Log

- ▶ Select **Menu > Alert Log** in the Sprint Mobile Broadband interface window.

About the Alert Log

The Alert Log displays a table with four columns: Date/Time, Alert, Connection Name, and Type.

You can select entries by using the arrow keys on your keyboard or the mouse. Selected entries are highlighted. By default, no entry is selected.

Click the **Clear** button to access the Clear Alert Log dialog box. Click **Yes** to confirm the delete or **No** to cancel.

Device Info & Diagnostics

Device Info & Diagnostics can help identify problems associated with connecting to the network. Device Info & Diagnostics evaluates issues with your USB port, port configuration, signal strength, the network, and more. Once the program runs a diagnostics check it can recommend possible solutions.

Accessing Diagnostics

- ▶ Select **Menu > Device Info & Diagnostics** in the Sprint Mobile Broadband interface window.

About Device Info & Diagnostics

The Device Info & Diagnostics dialog box allows you to select a number of ways to troubleshoot or obtain more information about your device.

The tests automatically run when the window opens.

To view your system parameters, including installed files:

- ▶ Click the **System Information** button.

Information obtained from the System Information sections can be used to create a report, which can be saved and then sent via email to a Sprint Customer Service representative to help in troubleshooting your computer.

Section 3

Web Access and Location Based Services



Web Access

In This Section

- ♦ Web
 - ♦ FAQs
-

This section provides information on accessing the Web with your device, and how to personalize your Internet services. It also provides you with a list of frequently asked questions (FAQs).

Accessing the Web

To access the Web:

1. Start Sprint Mobile Broadband by double-clicking the icon on your desktop.
2. Click **GO** to launch your data connection.
3. Once your data connection is established, you may start your browser application (for example, Internet Explorer or Netscape Navigator).

Your User Name

When you buy a Sprint Mobile Broadband USB modem and sign up for service, you're automatically assigned a user name. Your user name identifies you on the network and is also useful as an address for email and text messaging, as a way to personalize Internet services, and as an online virtual identity.

A user name is typically based on the customer's name and a number, followed by “@sprintpcs.com.” For example, the third John Smith to sign up for Sprint service might have jsmith003@sprintpcs.com as his user name. If you want a particular user name, you can visit www.sprint.com and get the name you want – as long as nobody else has it.

Your user name will be automatically programmed into your device. You don't have to enter it.

FAQs

How will I know when my device is ready for data service?

Your user name (for example, bsmith001@sprintpcs.com) will be displayed on the Sprint Mobile Broadband display screen.

How do I sign in for the first time?

You are automatically signed in to data services when you launch Sprint Mobile Broadband.

How do I know when my device is connected to data services?

Your device automatically connects when data service is used or an incoming message arrives.

When is my data connection active?

Your connection is active when data is being transferred and “Connected” appears on the Sprint Mobile Broadband display screen.

When is my data connection dormant?

If no data is transmitted or received for approximately 10 seconds, the connection goes dormant. (The connection can go active again quickly.) If no data is transmitted or received for an extended period of time, the connection will terminate.

Can I sign out of data services?

You can sign out without turning off your device. However you will not be able to browse the Web or use other data services. You may sign in again at any time. To sign out, select **Menu > Settings > Internet > Sign Out** in Sprint Mobile Broadband.

How can I optimize my settings to achieve faster speeds and send and receive less data while dialing into my company network?

For optimized results, work in “Offline” mode and synchronize periodically to send and receive company email. Also, save attachments or drag them into desktop folders before opening them (rather than double-clicking them in the email).

For more detailed information, see the Microsoft white paper at <http://www.microsoft.com/office/outlook/evaluation/perform.doc>.

Location Based Services

In This Section

- ◆ **Location and Search Services**
 - ◆ **Global Positioning System Receiver**
 - ◆ **FAQs**
-

This section provides information on Sprint's Location and Search Services, and how to use your GPS receiver with GPS applications. It also provides you with a list of frequently asked questions (FAQs).

Location and Search Services

Use Location & Search Services to find the nearest Sprint store, nearby restaurants, banks, hotels, gas stations, or coffee houses using the wireless-assisted global positioning system (GPS) built into your device.

Accessing the Location & Search Services Menu

To access Location & Search Services:

1. Start Sprint Mobile Broadband by double-clicking the icon on your desktop.
2. Click **Menu** on the Sprint Mobile Broadband Interface.
3. Select Location & Search Services from the submenu.

When you use Sprint Location & Search Services and agree to the Privacy Consent Message, your Internet browser will start and connect to either Microsoft Live™, MapQuest®, Yahoo!® Maps, or Google™ Maps depending upon the service you select under Mapping and Search Service preferences. The default is Microsoft Live. (See “Mapping and Search Service” on page 88.)

Global Positioning System Receiver

Your device has a built-in high sensitivity Global Positioning System (GPS) receiver. A GPS receiver uses signals from a constellation of 24 satellites with worldwide coverage in six orbital planes to pinpoint its exact location.

Access online information when and where you need it most. Get real-time visual driving directions, perform local business searches, and access live traffic directly from your GPS-ready device. Using wireless communication and GPS technology, your device will retrieve the positions automatically with the highest sensitivity and accuracy. The GPS receiver also allows

you to use, various GPS applications, such as Microsoft Streets & Trips, using your device. (See “Using your GPS receiver with GPS applications” on page 124.)

GPS satellites circle the earth twice a day in a very precise orbit and transmit radio signal information to earth. The GPS receiver then takes this information to calculate your precise location. A GPS receiver must be locked on to the signal of at least three orbiting satellites to calculate a 2D position (latitude and longitude) and track movement. With four or more satellites in sight, the USB modem’s GPS receiver can determine your 3D position (latitude, longitude and elevation) as well as the horizontal 3D estimated position error (HEPE).

To display your GPS receiver

1. Select **Menu > Settings > Sprint Location Services**
2. Select the **Display GPS Receiver** check box to have the GPS receiver interface displayed when you start Sprint Mobile Broadband. The GPS receiver will show under the main interface. When this box is unchecked the GPS receiver interface will not be shown.

Using your GPS receiver with GPS applications

In order to use the GPS COM port on your computer to obtain location coordinates with a GPS application you must first:

1. Install the GPS application, and start Sprint Mobile Broadband.
2. Click **GO** on the GPS receiver interface to direct the GPS receiver to start, and then start the location-based application. (See “The Sprint Mobile Broadband GPS Receiver Window” on page 61.)
3. Once you make a connection in the device software, you can launch any location-based application you have installed on your computer.

FAQs

What is GPS?

The Global Positioning System (GPS) is a term used for satellite navigation systems. More than two dozen GPS satellites orbit the earth, transmitting radio signals, which allow GPS receivers to determine their location, speed, and direction.

What is A-GPS?

A-GPS (Assisted GPS) is a technology that uses an assistance server to cut down the time needed to determine a location using GPS .

What is LBS?

LBS (Location Based Services) are used to provide enhanced local search functionality via Internet mapping services.

What are Location Based Services (LBS)?

Location Based services allow your device to get its current position from the Location Server on the Sprint network, and provide you with the ability to find nearby locations such as Gas stations, Hotels, Restaurants, Banks, etc.

Does it cost anything to use Sprint Location Services?

At this time, the Location Services currently being released have no additional cost or MRC. There are no plans to charge for this AFLT/MS-Based service.

What is AFLT?

AFLT (Advanced Forward Link Trilateration) is a type of device-based position location technology. Unlike A-GPS, AFLT does not use GPS satellites to determine location. To determine location, the device takes measurements of signals from nearby cellular base stations (towers) and reports the time and distance readings back to the network, which are then used to triangulate an

approximate location for the device. In general, at least three surrounding base stations are required to get an optimal position fix.

What does MS-Based mode of operation mean?

MS-Based (Mobile Station-Based) GPS mode is defined as an implementation where assistance data is provided to the mobile station or device by the Location server, such that the device can calculate its own location estimate.

Does this device actually use GPS satellites to calculate its locations?

It depends. If you are indoors, then the answer is no – instead, AFLT is used. AFLT uses base station triangulation to calculate your location. If you are outside, then it will use MS-Based GPS and actual satellites are used to determine your location.

How accurate is AFLT if it does not use real satellites?

AFLT accuracy is limited to the geometry of the cellular base stations surrounding the device requesting location information. The better the triangulation, the more accurate the fix.

How long does it take to get the first GPS fix?

Once you connect to the Sprint network you should get a fix within 10 seconds.

Is there a minimum time before a new fix can be made?

Fixes are cached for five minutes. During that time, any queries the user makes will reuse the same GPS location coordinate values.

Will my device location services work indoors?

Yes, but it uses AFLT to determine your location. This version of the service works best when the user is outdoors. Please

see the Location & Search Services section on page 76 for more details.

What does the “Test GPS” button do?

It provides a quick way to validate if the device is able to obtain location coordinates — if this works then the application used with this device in the same location will also work.

What info does “Test GPS” show in the box?

It tests the GPS mode that the device is configured for. In the case of the Sprint Mobile Broadband devices, it will test for MS-Based GPS, and is used for testing if the satellites are available. Autonomous and MS-Assisted GPS are not available in this version.

What does “HEPE” mean?

HEPE (Horizontal Estimated Position Error) is an Estimated Position Error (EPE) without considering the inaccuracy of your altitude reading. Because of the inherent difficulty of calculating altitude with GPS, an HEPE is usually a smaller number than EPE.

What is a GPS signal?

GPS satellites transmit signals to equipment on the ground. GPS receivers passively receive satellite signals, but do not transmit. There are various GPS standards consisting of three major segments: Space, Control and User Plane.

What is the GPS Space Plane?

The GPS Space Plane refers to the more than two dozen GPS satellites that orbit the earth, transmitting radio signals.

What is the GPS User Plane?

It is the ability to execute GPS requests at the subscriber level on the device.

What is the GPS Control Plane?

It refers to GPS requests that are executed at the server level via the network.

What is NMEA?

NMEA (National Marine Electronics Association). NMEA 0183 is a standard protocol used by GPS receivers to transmit data. NMEA output is composed of various strings. Sprint GPS devices support the following strings: \$GPGGA, \$GPRMC, \$GPGSA, and \$GPGSV.

When do I need NMEA?

You only need NMEA when using GPS applications that require an NMEA output stream. We recommend not activating the NMEA stream unless one is going to use it, to ensure the best possible data performance on the device.

What GPS mode options are supported?

GPS on your device works the same as on any other GPS device. Sprint provides two types of GPS options: GPS Basic and GPS Premium. Also, GPS services are not supported in EVDO Only Mode and the device must be set to Automatic or 1xRTT Mode.

What is GPS Basic?

GPS Basic is a mode that allows your device to be used for regular GPS outdoor use. In this mode GPS receivers require an unobstructed view of GPS satellites, and often do not perform well within forested areas or near tall buildings.

Sprint GPS Basic is based on GPSone standards and uses LBS for the first fast GPS fix. GPS coordinate values are made available for applications via a local GPS NMEA com port.

What is GPS Premium?

This GPS mode option is not yet available at this time.

GPS Premium allows for enhanced GPS on a GPS-capable data card, and can be used for indoor and outdoor use. This option functions the same as GPS Basic, and also allows for GPS to be used where no GPS satellites are available by utilizing LBS.

Is a GPS subscription required?

For GPS Basic no GPS subscription is required. For GPS Premium a GPS subscription would be required when that option becomes available.

What is difference between GPS Basic and GPS Premium?

GPS Basic is for outdoor use similar to regular GPS device capability. GPS Premium is an enhanced GPS capability, which can be used indoors and outdoors.

What is enhanced local search?

It is a quick easy method to run local search queries to find locations to and directions to places and businesses via Sprint Mobile Broadband. The enhanced local search uses LBS, which allows you to search for Sprint Nextel stores, hotels, restaurants, coffee shops, banks, and so forth indoors and outdoors.

How do I get the enhanced local search feature?

The enhanced local search is available as part of the latest Sprint Mobile Broadband software. This feature allows you to submit a custom query, or use one of the predefined seven finder services that are included by default.

What is a GPS application?

A GPS application is an application that uses NMEA data to get regular location coordinate updates and values typically displayed in a user interface. Examples of GPS applications are Microsoft Streets & Trips and Map Point.

How do I enable GPS?

By default Location services are enabled. You can also select or deselect “Enable Location Services” from the Location Settings screen.

Does GPS work when Privacy is set to “ON”?

No, turning Privacy on means you do not want the device to be discoverable; thus GPS is not started on the device.

How do I configure my NMEA port?

At this time you can not configure which port to use. The operating system auto-configured the next available port when your device was installed.

How do I Start and Stop NMEA?

This can be done by selecting the “Go” or “Stop” button on the GPS receiver interface in Sprint Mobile Broadband.

How do I use GPS applications with a Sprint GPS-capable device?

Once you have started GPS NMEA, identify the local port configured for GPS on your computer by using the operating system device manager utility. (See operating system help for assistance with device manager utility). Configure your GPS application to listen on the GPS/NMEA com port.

Can I use LBS and GPS when my device is configured for NDIS?

Yes, LBS and GPS are supported while the device is in NDIS mode.

Section 4

Technical Specifications and Regulatory Information



Technical Specifications

In This Section

- ◆ **CDMA Networks**
 - ◆ **Environmental Specifications**
 - ◆ **Mechanical Specifications**
 - ◆ **Software Specifications**
 - ◆ **Transmitter Specifications**
 - ◆ **Receiver Specifications**
 - ◆ **Hardware Specifications**
 - ◆ **Miscellaneous**
-

This section outlines the environmental and technical specifications for your new Sprint Mobile Broadband USB modem.

CDMA Networks

The Sprint Mobile Broadband USB modem operates over a type of wireless network called CDMA (Code Division Multiple Access). This network technology has many features beyond providing a wireless link, such as Web Messaging, which allows you to receive short messages using the Sprint Mobile Broadband USB modem.

To use the Sprint Mobile Broadband USB modem, you need an account that gives you access to a CDMA network.

Every CDMA network operates on one of three radio frequency bands. Your Sprint Mobile Broadband USB modem takes advantage of the high-speed CDMA 1xEV-DO network and operates on the 800 to 1900 MHz frequency bands.

The Sprint Mobile Broadband USB modem uses CDMA 1xEV-DO Rev A technology and is backwardly compatible with currently deployed EV-DO Rev 0 and 1xRTT, enabling real-time high-speed wireless access to email, the Internet, or your company network. The device runs on most current Windows-compatible laptop or desktop computers, and it provides peak data transmission speeds of up to 3.1 megabits per second (Mbps) on the downlink and up to 1.8 Mbps on the uplink on EV-DO Rev A networks.

Note:

The Sprint Mobile Broadband USB modem provides average download speeds in EV-DO Rev. A coverage areas of 600-1400 kilobits per second (kbps) and average upload speeds of 350-500 kbps. Average download speeds outside the EV-DO Rev. A coverage area are 400-700 Kbps with average upload speeds of 50-70 Kbps.

More information about CDMA networks is available on the CDMA Development Group Web site, www.cdg.org.

USB EVDO Modem

A USB modem (EVDO device) is a revolutionary new way to access the Internet, while delivering the most advanced multimedia streaming services and connectivity. Almost every laptop and desktop has a USB port, so this provides you with the ability to easily move your Sprint Mobile Broadband USB modem from platform to platform (laptop or desktop).

During Sprint connections, the Sprint Mobile Broadband USB modem is a true USB EVDO modem, functioning just like conventional modems. It has an advanced dual-band diversity antenna system design that incorporates an external flip antenna, maximizing data speed and performance, and allowing for stronger network signal reception. Once installed and configured for NDIS mode, the USB modem connects instantly to the CDMA network with just a few mouse clicks. To surf the Web, you simply connect the USB modem to a USB port, click a few buttons, and launch your Internet browser. To access your company network, you may need to launch an extranet client after you connect to the CDMA network.

Tip:

To optimize your settings for faster speeds and data conservation when accessing your company network, work in "Offline" mode and synchronize periodically to send and receive company email. Do not use the Preview Pane, and save or drag and drop attachments to a desktop folder before opening them (rather than double-clicking them in the email). For more detailed information, see the Microsoft white paper located at: www.microsoft.com/office/outlook/evaluation/perform.doc.

Environmental Specifications

Operating temperature	0° C to +45° C (32°F to 113° F)
Storage temperature	-20° C to +65° C (-4° F to 149° F)
Humidity	5% to 90% over operating temperature
Vibration Stability	5 Hz to 500 Hz, 0.1 octave/second
Drop	1 meter drop, no damage – fully operational

Mechanical Specifications

Dimensions (W x D x H)	25 mm x 17.6 mm x 12 mm 2.76 in x 0.98 in x 0.47 in
Weight	32 grams / 1.3 oz
Battery Pack	N/A
LED	3-Color Service State
Antenna	External Flip-Up and Internal Mobile Receive Diversity Antenna

Software Specifications

CDMA specification	EVDO Rev A
Data service	Supported
SMS (IS-637)	Currently not supported
OMA-DM	Supported
OTAPA (IS-683A)	Supported
PRL (preferred roaming list)	Supported
Authentication	Supported
NAM	1
Mobile IP	Supported
WNP (wireless number portability)	Supported

Transmitter Specifications

Multiplexing type	EVDO and 1xRTT
Normal output power	7-10 dBm
TX Max power	23 dBm
Frequency range	1850 MHz to 1919 MHz
Frequency stability	Compliant with CDG1
Bandwidth	1.25 MHz
Occupied bandwidth	1.25 MHz
Modulation method	O-QPSK/HPSK
Waveform quality	.944
Conducted spurious emission	Complies with Title 47, Part 24 of the FCC Rules
Common RF impedance	50 ohms

Receiver Specifications

Receiving type	EVDO and 1xRTT
Frequency range	1930 MHz to 1990 MHz
Bandwidth	1.25 MHz
Occupied bandwidth	1.25 MHz
Modulation method	O-QPSK/HPSK
Receiver sensitivity	-104 dBm
Inter-modulation spurious response attenuation	Complies with CDG stage 1
Common RF impedance	50 ohms

Hardware Specifications

Interface type	Type A USB Port
Common air interface	1xEVDO
Channel spacing	50 kHz
Chipset	QUALCOMM™ MSM6800-2
Transmitting (max. data rate)	Forward link: 3.1 Mbps Reverse link: 1.8 Mbps
Supply voltage	5 V
Battery	N/A
Charger (charging time)	N/A
Current consumption Sleep/idle Average in-use Max. (peak)	45 mA 400 mA 500mA
Communication ports	USB
Voice capability	Not supported

Miscellaneous

Certification & Approval	FCC (parts 2, 22, & 24, SAR), UL, CDG, etc.
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Regulatory Information

In This Section

- ♦ **WARNING (EMI) – United States FCC Information**
 - ♦ **WARNING (EMI) – Canada**
-

This section outlines important regulatory notices concerning your device.

Regulatory Notices

This device is compliant with Parts 2, 22, and 24 of the FCC Rules. Operation of this device is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesirable operations.

In order to comply with FCC RF Exposure requirements, this device must be installed so that a minimum separation distance of 8.5mm (0.33") is maintained between the antenna and all persons during ordinary operating conditions contingent upon the following:

1. The laptop or PC is placed on a desktop, table or flat surface
2. The device is placed on a flat surface

FCC ID: PKRNVWMCD3000

CAUTION Unauthorized modifications or changes not expressly approved by Sprint Communications Company L.P. could void compliance with regulatory rules and thereby your authority to use this equipment.

WARNING (EMI) – United States FCC Information

This equipment has been tested and found to comply with the limits pursuant to Parts 2, 22, and 24 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in an appropriate installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to

radio communication. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the notebook PC.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING (EMI) – Canada

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference causing equipment standard entitled “Digital Apparatus,” ICES-003 of the Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: “Appareils Numériques,” NMB-003 édictée par le ministre des Communications.

If you have purchased this product under a United States Government contract, it shall be subject to restrictions as set forth in subparagraph (c)(1)(ii) of Defense Federal Acquisitions Regulations (DFARs) Section 252.227-7013 for Department of Defense contracts, and as set forth in Federal Acquisitions Regulations (FARs) Section 52.227-19 for civilian agency contracts or any successor regulations. If further government regulations apply, it is your responsibility to ensure compliance with such regulations.

Section 5

Safety and Terms & Conditions



Safety and Notices

In This Section

- ♦ Important Notice
 - ♦ Safety and Hazards
-

This section outlines important liability and safety guidelines concerning your new Sprint Mobile Broadband USB modem.

Important Notice

Because of the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors), or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the Sprint Mobile Broadband USB modem are used in a normal manner with a well-constructed network, they should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. SPRINT SPECTRUM L.P. accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Sprint Mobile Broadband USB modem, or for failure of the Sprint Mobile Broadband USB modem to transmit or receive such data.

Safety and Hazards

Do not operate the Sprint Mobile Broadband USB modem in areas where blasting is in progress, where explosive atmospheres may be present, near medical equipment, life support equipment, or any equipment which may be susceptible to any form of radio interference. In such areas, the Sprint Mobile Broadband USB modem **MUST BE POWERED OFF**. It can transmit signals that could interfere with this equipment.

Do not operate the Sprint Mobile Broadband USB modem in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sprint Mobile Broadband USB modem **MUST BE POWERED OFF**. When operating, it can transmit signals that could interfere with various onboard systems.

The driver or operator of any vehicle should not operate the Sprint Mobile Broadband USB modem while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some jurisdictions, operating such communications devices while in control of a vehicle is an offense.

Terms and Conditions

In This Section

- ◆ **Subscriber Agreement: General Terms and Conditions of Service**
 - ◆ **Novatel Wireless Limited Warranty and Liability**
-

This section contains the terms and conditions of service for your new Sprint Mobile Broadband USB modem.

Subscriber Agreement

General Terms and Conditions of Service

Please note these terms may not be the most current version. A current version of the terms is available at our Web site or upon request.

Para solicitar esta literatura en español, por favor contactar a 1-800-777-4681.

Basic Definitions

In this document: (1) “we,” “us,” “our” mean Sprint Solutions, Inc. and its affiliates doing business as Sprint or Sprint PCS; (2) “you,” “your,” “customer,” and “user” mean an account holder or user with us; (3) “Device” means any phone, device, accessory or other product we sell to you or that is active on your account with us; and (4) “Service” means our offers, rate plans, options, wireless services or Devices on your account with us.

The Subscriber Agreement

The Subscriber Agreement (“Agreement”) is a contract under which we provide and you accept our Services. In addition to these Terms and Conditions of Service (“Ts&Cs”), there are several parts to the Agreement, including, but not limited to, the detailed plan or other information on Services we provide or refer you to during the sales transaction, and any confirmation materials we may provide you. It is important that you carefully read all of the terms of the Agreement.

Services Covered By These Ts&Cs & Additional Terms

These Ts&Cs apply to our standard wireless Services and any other Service we offer you that references these Ts&Cs. Different terms will apply to most business accounts. Additional terms will apply when you use certain Services,

typically those you can access online (for example, picture/video Services, online forums, etc.). Additional terms will also apply if you activate Services as part of a bundle with another company's services (for example, cable services, home phone services, etc.). The additional terms for bundled Services may either modify or replace certain provisions in these Ts&Cs, including terms relating to activation, invoicing/payment, and disputing charges. Also, a different dispute resolution provision may apply to services provided by another company (the dispute resolution provisions in this Agreement still apply to our Services). You will be provided details on any additional terms with your selection of any bundled Service.

Our Policies

Services are subject to our business policies, practices and procedures ("Policies"), including, but not limited to, our Privacy Policy and Acceptable Use Policy and Visitor Agreement – both available at our Web site. You agree to all of our Policies when you use our Services. Our Policies are subject to change at anytime with or without notice.

When You Accept The Agreement

You must have the legal capacity to accept the Agreement. You accept the Agreement when you do any of the following: (a) sign a contract with us on paper or electronically; (b) accept Agreement through an oral or electronic statement; (c) attempt to or in any way use the Services; (d) pay for the Services; or (e) open any package or start any program that says you are accepting the Agreement when doing so. **If you don't want to accept the Agreement, don't do any of these things.**

Term Commitments & Early Termination Fees

Many of the Services (for example, rate plans and Device discounts) that we offer require you to maintain certain Services with us for a minimum term, usually 1 or 2 years ("Term Commitment"). **You will be charged a fee ("Early Termination Fee") for**

each line of Service that you terminate early (i.e., prior to satisfying the Term Commitment) or for each line of Service that we terminate early for good reason (for example, violating the payment or other terms of the Agreement). Early Termination Fees are a part of our rates. Your exact Term Commitment and Early Termination Fee may vary based on the Services you select and will be disclosed to you during the sales transaction. Carefully review any Term Commitment and Early Termination Fee requirements prior to selecting Services. After you have satisfied your Term Commitment, your Services continue on a month-to-month basis without any Early Termination Fee, unless you agree to extend your Term Commitment or agree to a new Term Commitment – for example, by accepting a new rate plan or upgrading your Device. As explained directly below, there are instances when you will not be responsible for an Early Termination Fee for terminating Services early.

When You Don't Have To Pay An Early Termination Fee

You aren't responsible for paying an Early Termination Fee when terminating Services: (a) provided on a month-to-month basis; (b) consistent with our published trial period return policy; or (c) in response to a materially adverse change we make to the Agreement as described directly below.

Our Right To Change The Agreement & Your Related Rights

We may change any part of the Agreement at any time, including, but not limited to, rates, charges, how we calculate charges, or your terms of Service. We will provide you notice of material changes, and may provide you notice of non- material changes, in a manner consistent with this Agreement (see “Providing Notice Under This Agreement” paragraph). Except as provided below, if a change we make to the Agreement is material and has a material adverse effect on you, you may terminate each line of Service

materially affected without incurring an Early Termination Fee only if you: (a) call us within 30 days after the effective date of the change; and (b) specifically advise us that you wish to cancel Services because of a material change to the Agreement that we have made. If you do not cancel Service within 30 days of the change, an Early Termination Fee will apply if you terminate Services before the end of any applicable Term Commitment.

Our Right To Suspend Or Terminate Services

We can, without notice, suspend or terminate any Service at any time for any reason, including, but not limited to: (a) late payment; (b) exceeding an Account Spending Limit (“ASL”); (c) harassing/threatening our employees or agents; (d) providing false information; (e) interfering with our operations; (f) using/suspicion of using Services in any manner restricted by or inconsistent with the Agreement; (g) breaching the Agreement, including our Policies; (h) providing false, inaccurate, dated or unverifiable identification or credit information, or becoming insolvent or bankrupt; (i) modifying a Device from its manufacturer specifications; or (j) if we believe the action protects our interests, any customer’s interests or our network..

Your Ability To Change Services & When Changes Are Effective

You typically can change Services upon request. In some instances, changes may be conditioned on payment of an Early Termination Fee or certain other charges, or they may require you to accept a new Term Commitment. Changes to Services are usually effective at the start of your next full invoicing cycle. If the changes take place sooner, your invoice may reflect pro-rated charges for your old and new Services.

Your Right To Terminate Services

You can terminate Services at any time by calling us and requesting that we deactivate all Services. You’re responsible for all charges billed or incurred prior to deactivation. If Services are terminated before the end of your invoicing cycle, we won’t won’t

prorate charges to the date of termination and you won't receive a credit or refund for any unused Services. **Except as provided above, you must also pay us an Early Termination Fee for each line of Service that you terminate early.**

Credit Checks & Credit Information

We agree to provide you Services on the condition you have and maintain satisfactory credit according to our standards and policies. You agree to provide information we may request or complete any applications we may provide you to facilitate our review. We rely on the credit information you furnish, credit bureau reports or other data available from commercial credit reference services, and other information (such as payment history with us) to determine whether to provide or continue to provide you Services. The Services we offer you can vary based on your credit history. We may at any time, based on your credit history, withdraw or change Services, or place limits or conditions on the use of our Services. You agree to provide us updated credit information upon request. We may provide your payment history and other account billing/charge information to any credit reporting agency or industry clearinghouse.

Account Spending Limits ("ASL")

An ASL is a temporary or permanent limit (typically based on credit history, payment history, or to prevent fraud) we place on the amount of unpaid charges you can accumulate on your account, regardless of when payment on those charges is due. We reserve the right to determine which charges count towards an ASL. If you have an ASL, we may suspend your Services without prior notice if your account balance reaches the ASL, even if your account is not past due. We may impose or increase an ASL at any time with notice. An ASL is for our benefit only and should not be relied on by you to manage usage.

Deposits & Returning Deposits

We may at any time require a deposit, as a guarantee of payment, for you to establish or maintain Service (“Deposit”). By providing us a Deposit, you grant us a security interest for all current or future amounts owed to us. We may change the Deposit at any time with notice. You can’t use a Deposit to make or delay payments. The Deposit, the length of time we hold the Deposit, and changes to the Deposit are determined based on your credit history, payment history and other factors. Unless prohibited by law, we may mix Deposits with our other funds and it won’t earn interest and we reserve the right to return the Deposit as a credit on your invoice at anytime. If your Services are terminated for any reason, we may keep and apply your Deposit to any outstanding charges. We’ll send any remaining portion of Deposit to your last known address within 90 days after your final invoice – if it is returned to us, we will forward it on to the appropriate state authorities to the extent required by law.

Restrictions On Using Services

You can’t use our Services: (a) to transmit content/messages that are, or in any manner that is, illegal, fraudulent, threatening, abusive, defamatory, or obscene; (b) in a way that could cause damage or adversely affect our customers, reputation, network, property or Services; (c) to communicate any unsolicited commercial voice, text, SMS, or other message; (d) to infringe on the copyright of another, or upload or transmit any “virus”, “worm”, or malicious code; or (e) in any way prohibited by the terms of our Services, the Agreement or our Policies.

Your Device, Number & E-mail Address; Caller ID

We don’t manufacture any Device we might sell to you or that is associated with our Services, and we aren’t responsible for any defects, acts or omissions of the manufacturer. **The only warranties on your Device are the limited warranties given to you by the manufacturer directly or that we pass through.** Your Device is

designed exclusively for use on our network and in other coverage areas we make available to you. It will not accept wireless service from another carrier. Except for any legal right you may have to port/transfer your phone number to another carrier, you have no and cannot gain any (for example, through publication, use, etc.) proprietary, ownership or other rights to any phone number, identification number, e-mail address or other identifier we assign to you, your Device or your account. We'll notify you if we decide to change or reassign them.

Porting/Transferring Phone Numbers

We don't guarantee that number transfers to or from us will be successful. If you authorize another carrier to transfer a number away from us, that is considered a request by you to us to terminate all of the Services associated with that number. You're responsible for all charges billed or incurred prior to deactivation and for any applicable Early Termination Fees.

Coverage; Where Your Device Will Work

Our coverage maps are available at our stores and at our Web site. The specific network coverage you get will depend on the radio transmissions your Device can pick up and Services you've chosen. **Our coverage maps provide high level estimates of our coverage areas when using Services outdoors under optimal conditions. Coverage isn't available everywhere. Estimating wireless coverage and signal strength is not an exact science. There are gaps in coverage within our estimated coverage areas that, along with other factors both within and beyond our control (network problems, software, signal strength, your Device, structures, buildings, weather, geography, topography, etc.), may result in dropped and blocked connections, slower data speeds, or otherwise impact the quality of Service. Services that rely on location information, such as E911 and GPS navigation,**

depend on your Device's ability to acquire satellite signals (typically not available indoors) and network coverage.

Roaming

"Roaming" typically refers to coverage on another carrier's network that we make available to you based on our agreements with other carriers. These agreements may change from time to time and roaming coverage is subject to change. Your ability to receive roaming coverage depends on the radio transmissions your Device can pick up. You can pick up roaming coverage both within and outside our network coverage areas. Your Device will generally indicate when you're roaming. Depending on your Services, separate charges or limits on the amount of minutes used while roaming may apply. Certain Services may not be available or work the same when roaming (including data Services, voicemail, call waiting, etc.).

About Data Services & Content

Our data Services and your Device may allow you to access the internet, text, pictures, video, games, graphics, music, email, sound and other materials ("Data Content") or send Data Content elsewhere. Some Data Content is available from us or our vendors, while other Data Content can be accessed from others (third party Web sites, games, ringtones, etc.). We make absolutely no guarantees about the Data Content you access on your Device.

Data Content may be: (1) unsuitable for children/minors; (2) unreliable or inaccurate; or (3) offensive, indecent or objectionable.

You're solely responsible for evaluating the Data Content accessed by you or anyone on your account. We strongly recommend you monitor data usage by children/minors. Data Content from third parties may also harm your Device or its software. To protect our network, Services, or for other reasons, we may place restrictions on accessing certain Data Content (such as certain Web sites, applications, etc.), impose separate charges, limit throughput or the amount of data you can transfer, or otherwise limit or

terminate Services. If we provide you storage for Data Content you have purchased, we may delete the Data Content with notice or place restrictions/limits on the use of storage areas. You may not be able to make or receive voice calls while using data Services.

Specific Terms & Restrictions On Using Data Services

In addition to the rules for using all of our other Services, unless we identify the Service or Device you have selected as specifically intended for that purpose (for example, wireless routers, Data Link, etc.), you can't use our data Services: (1) with server devices or host computer applications, or other systems that drive continuous heavy traffic or data sessions; and (2) as a substitute or backup for private lines or frame relay connections. We reserve the right to limit or suspend any heavy, continuous data usage that adversely impacts our network performance or hinders access to our network. If your Services include unlimited Web or data access, you also can't use your Device as a modem for computers or other equipment, unless we identify the Service or Device you have selected as specifically intended for that purpose (for example, with "phone as modem" plans, Sprint Mobile Broadband card plans, wireless router plans, etc.).

Activation & Miscellaneous Charges

Based on our Policies, we may charge activation, prepayment, reactivation, program or other fees to establish or maintain Services. Certain transactions may also be subject to a charge (for example, convenience payment, changing phone numbers, handset upgrades, etc.). You will be provided notice of these types of fees before we complete the requested transaction.

Account & Service Charges; Pro-rating; Unused Minutes

You are responsible for all charges associated with your account and the Services on your account, no matter who uses the

Services. Charges include, but are not limited to, the monthly recurring charges, usage charges, taxes, surcharges and fees associated with your Services. These charges are described or referred to during the sales transaction, in our marketing materials, and in confirmation materials we may send to you.

How We Calculate Your Charges For Billing Purposes

Regular Voice Calls: We round up partial minutes of use to the next full minute. Time starts when you press “Talk” or your Device connects to the network and stops when you press “End” or the network connection otherwise breaks. You’re charged for all calls that connect, even to answering machines. You won’t be charged for unanswered calls or if you get a busy signal. For incoming calls answered, you’re charged from the time shortly before the Device starts ringing until you press END or the network connection otherwise breaks. If charges vary depending on the time of day that you place or receive calls (e.g., Nights and Weekend plans), you’re charged for the entire call based on the rate that applies to the time period in which the call starts.

iDEN Walkie-Talkie Charges: Charges for walkie-talkie calls are billed to the person who starts the call and calculated by multiplying the duration of the call by the applicable rate and number of participants. You’re charged at least 6 seconds of airtime for each call you start; subsequent communications in the same call are rounded up to and billed to the next second. Time begins when you press any button to start a walkie-talkie call and ends approximately 6 seconds after completion of a communication to which no participant responds – subsequent walkie-talkie communications are considered new calls. Depending on your plan, nationwide, international or group walkie-talkie calls may use the local walkietalkie minutes in your plan and result in additional charges. Responses to call alert transmissions are treated as new walkie-talkie transmissions even when responding within 6 seconds of receiving the alert.

Data Usage: Unless we specifically tell you otherwise, data usage is measured in bytes, kilobytes and megabytes – not in minutes/time. 1024 bytes equals 1 kilobyte (“KB”), and 1024 KB equals 1 megabyte. Bytes are rounded up to kilobytes, so you will be charged at least 1 KB for each data usage session (“data session”). Rounding occurs at the end of each data session, and sometimes during a data session. Depending on your data Services, usage may be charged against an allowance or on a fixed price per KB. If you are charged on a fixed price per KB, any fractional cents will be rounded up to the next cent. You are charged for all data directed to your Device’s internet address, including data sessions you did not initiate and for incomplete transfers. As long as your Device is connected to our data network, you may incur data charges. Examples of data you will be charged for includes the size of a requested file or Data Content (game, ringer, etc.), Web page graphics (logos, pictures, banners, advertisement, etc.), additional data used in accessing, transporting and routing the file on our network, data from partial or interrupted downloads, re-sent data, and data associated with unsuccessful attempts to reach Web sites or use applications. These data charges are in addition to any charges for the Data Content itself (game, ringer, etc.). Data used and charged to you will vary widely, even between identical actions or data sessions. Estimates of data usage – for example, the size of downloadable files – are not reliable predictors of actual usage. Your bill won’t separately list the number of KB attributed to a specific action/data session.

Your Bill

Your bill provides you notice of your charges. It reflects monthly recurring charges (usually billed one bill cycle in advance) and usage/transaction specific charges (usually billed in the bill cycle in which they’re incurred). Some usage charges, such as those that depend on usage information

from a third party, may be billed in subsequent bill cycles and result in higher than expected charges for that month. Bill cycles and dates may change from time to time. **Your bill may also include other important notices (for example, changes to this Agreement, to your Service, legal notices, etc.).** Your paper bill may not include individual call detail. Your call detail is available online. Paper bills with call detail may be subject to an additional charge. If you choose internet billing, you will not receive paper bills.

Your Payments; Late Fees

Payment is due in full as stated on your bill. If we do not receive payment in full by the date specified on your bill, a late payment charge, which may be charged at the highest rate permissible by law, may be applied to the total unpaid balance. We may also charge you any costs we pay to a collection agency to collect unpaid balances from you. If we bill you for amounts on behalf of a third party, payments received are first applied to our charges. You may be charged additional fees for certain methods of payment. We may charge you, up to the highest amount permitted by law, for returned checks or other payments paid by you and denied for any reason by a financial institution. Acceptance of payments (even if marked “paid in full”) does not waive our right to collect all amounts that you owe us. We may restrict your payment methods to cashier’s check, money order, or other similar secure form of payment at any time for good reason.

Taxes & Government Fees

You agree to pay all federal, state and local taxes, fees and other assessments that we’re required by law to collect on the Services we provide you and remit to the government. These charges may change from time to time without advance notice. If you’re claiming any tax exemption, you must provide us with a valid exemption certificate. Tax exemptions generally won’t be applied retroactively.

Surcharges

You agree to pay the surcharges, fees and other charges that we assess to recoup our government costs or costs of complying with certain government programs (“Surcharges”).

Surcharges aren’t taxes or government mandated charges; they’re charges we choose to collect from you. Surcharges are subject to change, sometimes on a monthly or quarterly basis.

Examples of Surcharges include, but are not limited to: Universal Service Fund, E911, Federal Programs Cost Recovery, Federal Wireless Number Pooling and Portability, and gross receipts charges. We will make efforts to provide you notice of any changes to Surcharges in a manner consistent with this Agreement (see “Providing Notice Under This Agreement” paragraph). However, since most Surcharges are based on amounts set by the government or based on government formulas, it will not always be possible to provide advance notice of new Surcharges or changes in the amount of existing Surcharges. Information on Surcharges is provided during the sales transaction and is available at our Web site.

Disputing Charges - You Must Still Pay Undisputed Charges

Any dispute to a charge on your bill must be made within 60 days of the date of the bill that initially contained the charge. Disputes can only be made by calling or writing us as directed on your invoice or elsewhere. You accept all charges not properly disputed within the above time period – undisputed charges must still be paid as stated on your bill.

Protecting Our Network & Services

We can take any action to: (1) protect our network, our rights and interests, or the rights of others; or (2) optimize or improve the overall use of our network and Services. Some of these actions may interrupt or prevent legitimate communications and usage – for example, message filtering/

blocking software to prevent SPAM or viruses, limiting throughput, limiting access to certain Web sites, applications or other Data Content, etc. For additional information on what we do to protect our customers, network, Services and equipment, see our Acceptable Use Policy and Visitor Agreement at our Web site.

Your Privacy

You agree to the terms of our Privacy Policy, available at our Web site, when you use our Services. This policy may change from time to time, so review this policy with regularity and care. Among other things, the policy includes important information on what information we collect about you, how we use that information, and with whom we share that information (for example, to provide you certain Services, to protect our rights and interests, to respond to legal process, to facilitate a merger, etc.). Also, to ensure the quality of our Services and for other lawful purposes, we may also monitor or record calls between us (for example, your conversations with our customer service or sales departments). If you do not agree with the terms of our Privacy Policy, do not purchase or use our Services.

Location Based Services

Our network generally knows the location of your Device when it is outdoors and turned on. By using various technologies to locate your Device, we can provide enhanced emergency 911 services, and optional location-sensitive services provided by us or a third party. Environmental factors (such as structures, buildings, weather, geography, landscape, and topography) can significantly impact the ability to access your Device's location information and use of location-sensitive services. The terms and conditions of any location-sensitive service that you purchase from us may provide more information about how location information is used and disclosed. Use of some of location-sensitive services may require network coverage. **If any Device on your account uses a location-sensitive service, you (the accountholder) must clearly and regularly**

notify the actual user of your Device that their location may be tracked or discovered. For additional information on location-sensitive services, see our Privacy Policy at our Web site.

911 Or Other Emergency Calls

Public Safety Officials advise that when making 911 or other emergency calls, you should always be prepared to provide your location information. Unlike traditional wireline phones, depending on a number of factors (e.g., whether your Device is GPS enabled, where you are, whether local emergency service providers have upgraded their equipment, etc.), 911 operators may not know your phone number, your location or the location of your Device. In certain circumstances, an emergency call may be routed to a state patrol dispatcher or alternative location set by local emergency service providers. Enhanced 911 service (“E911”), where enabled by local emergency authorities, uses GPS technology to provide location information. Even when available, however, E911 does not always provide accurate location information. If your Device is indoors or for some other reason cannot acquire a satellite signal, you may not be located. Some Devices have a safety feature that prevents use of the keypad after dialing 911 – you should follow voice prompts when interacting with emergency service providers employing IVR systems to screen calls.

If Your Device Is Lost or Stolen

Call us immediately if your Device is lost or stolen because you may be responsible for usage charges before you notify us of the alleged loss or theft. You agree to cooperate if we choose to investigate the matter (provide facts, sworn statements, etc.). We may not waive any Early Termination Fees if you choose to terminate Services as a result of loss or theft of your Device.

Disclaimer of Warranties

WE MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING (TO THE EXTENT ALLOWED BY LAW) ANY IMPLIED WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE CONCERNING YOUR SERVICES (INCLUDING YOUR DEVICE). WE DON'T PROMISE UNINTERRUPTED OR ERROR-FREE SERVICES AND DON'T AUTHORIZE ANYONE TO MAKE WARRANTIES ON OUR BEHALF.

You Agree We Are Not Responsible For Certain Problems

You agree that neither we nor our vendors, suppliers or licensors are responsible for any damages resulting from: (a) anything done or not done by someone else; (b) providing or failing to provide Services, including, but not limited to, deficiencies or problems with a Device or network coverage (for example, dropped, blocked, interrupted calls/messages, etc.); (c) traffic or other accidents, or any health-related claims relating to our Services; (d) Data Content or information accessed while using our Services; (e) an interruption or failure in accessing or attempting to access emergency services from a Device, including through 911, Enhanced 911 or otherwise; (f) interrupted, failed, or inaccurate location information services, (g) information or communication that is blocked by a spam filter, or (h) things beyond our control, including acts of God (for example, weather-related phenomena, fire, earthquake, hurricane, etc.), riot, strike, war, terrorism or government orders or acts.

You Agree Our Liability Is Limited - No Consequential Damages.

TO THE EXTENT ALLOWED BY LAW, OUR LIABILITY FOR MONETARY DAMAGES FOR ANY CLAIMS YOU MAY HAVE AGAINST US IS LIMITED TO NO MORE THAN THE PROPORTIONATE AMOUNT OF THE SERVICE CHARGES ATTRIBUTABLE TO THE AFFECTED PERIOD. UNDER NO CIRCUMSTANCES ARE WE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES OF ANY NATURE WHATSOEVER ARISING OUT OF OR RELATED TO

PROVIDING OR FAILING TO PROVIDE SERVICES IN CONNECTION WITH A DEVICE, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, LOSS OF BUSINESS, OR COST OF REPLACEMENT PRODUCTS AND SERVICES.

DISPUTE RESOLUTION

We Agree To First Contact Each Other With Any Disputes

We each agree to first contact each other with any disputes and provide a written description of the problem, all relevant documents/information and the proposed resolution. You agree to contact us with disputes by calling or writing us as instructed on your invoice. We will contact you by letter to your billing address or on your Device.

Instead Of Suing In Court, We Each Agree To Arbitrate Disputes

We each agree to finally settle all disputes (as defined and subject to any specific exceptions below) only by arbitration. In arbitration, there's no judge or jury and review is limited. However, just as a court would, the arbitrator must honor the terms and limitations in the Agreement and can award the same damages and relief, including any attorney's fees authorized by law. The arbitrator's decision and award is final and binding, with some exceptions under the Federal Arbitration Act ("FAA"), and judgment on the award may be entered in any court with jurisdiction. We each also agree as follows: (1) **"Disputes" are any claims or controversies against each other related in any way to our Services or the Agreement, including, but not limited to, coverage, Devices, privacy, or advertising, even if it arises after Services have terminated** – this includes claims you bring against our employees, agents, affiliates or other representatives, or that we bring against you.

(2) If either of us wants to arbitrate a dispute, we agree to send written notice to the other providing a description of

the dispute, previous efforts to resolve the dispute, all supporting documents/information, and the proposed resolution. Notice to you will be sent to your billing address and notice to us will be sent to: General Counsel; Arbitration Office; 2001 Edmund Halley Drive VARESP0513-502; Reston, Virginia 20191. We agree to make attempts to resolve the dispute. If we cannot resolve the dispute within forty-five (45) days of receipt of the notice to arbitrate, then we may submit the dispute to formal arbitration.

(3) The FAA applies to this Agreement and arbitration provision. We each agree the FAA's provisions, not state law, govern all questions of whether a dispute is subject to arbitration.

(4) The arbitration will be administered by the National Arbitration Forum ("NAF") under its arbitration rules. If any NAF rule conflicts with the terms of the Agreement, the terms of the Agreement apply. You can obtain procedures, rules, and fee information from the NAF at 1-800-474-2371 or www.cpradr.org.

(5) Unless we each agree otherwise, the Arbitration will be conducted by a single neutral arbitrator and will take place in the county of your last billing address. The federal or state law that applies to the Agreement will also apply during the arbitration.

(6) We each agree not to pursue arbitration on a classwide basis. We each agree that any arbitration will be solely between you and us (not brought on behalf of or together with another individual's claim). If for any reason any court or arbitrator holds that this restriction is unconscionable or unenforceable, then our agreement to arbitrate doesn't apply and the dispute must be brought in court.

(7) We each are responsible for our respective costs relating to counsel, experts, and witnesses, as well as any other costs relating to the arbitration. However, we will cover any arbitration administrative or filing fees above: (a) \$25 if you are seeking less than \$1,000 from us; or (b) the equivalent court filing fees for a court action in the appropriate jurisdiction if you are seeking \$1,000 or more from us.

Exceptions To Our Agreement To Arbitrate Disputes

Either of us may bring qualifying claims in small claims court. In addition, this arbitration provision does not prevent you from filing your dispute with any federal, state or local government agency that can, if the law allows, seek relief against us on your behalf.

No Class Actions

TO THE EXTENT ALLOWED BY LAW, WE EACH WAIVE ANY RIGHT TO PURSUE DISPUTES ON A CLASSWIDE BASIS; THAT IS, TO EITHER JOIN A CLAIM WITH THE CLAIM OF ANY OTHER PERSON OR ENTITY, OR ASSERT A CLAIM IN A REPRESENTATIVE CAPACITY ON BEHALF OF ANYONE ELSE IN ANY LAWSUIT, ARBITRATION OR OTHER PROCEEDING.

No Trial By Jury

TO THE EXTENT ALLOWED BY LAW, WE EACH WAIVE ANY RIGHT TO TRIAL BY JURY IN ANY LAWSUIT, ARBITRATION OR OTHER PROCEEDING.

Indemnification

You agree to indemnify, defend and hold us harmless from any claims arising out of your actions, including, but not limited to, failing to provide appropriate notices regarding location-sensitive services (see “Location Based Services” paragraph), or violating this Agreement, any applicable law or regulation or the rights of any third party.

Providing Notice To Each Other Under The Agreement

Except as the Agreement specifically provides otherwise, you must provide us notice by calling or writing us as instructed on your invoice. We will provide you notice in your bill, correspondence to your last known billing address, to any fax number or e-mail address you’ve provided us, by calling you on your home phone or Device, by voice message on your Device or home phone, or by text message on your Device.

Other Important Terms

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